



TAJEV

TÜRK ALMAN JİNEKOLOJİ
EĞİTİM, ARAŞTIRMA ve HİZMET VAKFI

XIV.

**TÜRK ALMAN
JİNEKOLOJİ
KONGRESİ**

WWW.TAJEV2022.ORG

28 Mayıs-1 Haziran 2022
Titanic Mardan Palace, Antalya



Bildiri Özetleri Kitabı



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Değerli Meslektaşlarım

1995 yılından beri süre gelen uluslararası katılımlı Türk-Alman Jinekoloji Kongresi’nin on dördüncüsü 28 Mayıs-1 Haziran 2022 tarihleri arasında Antalya’da gerçekleştirilecektir. Katılımcı sayısı ve yüksek kalitedeki bilimsel içeriği ile ulusal ve uluslararası düzeyde ön planda yer alan kongremizin zengin içeriğini tüm katılımcılarımıza doyurucu bir bilimsel program halinde sunmayı amaçlıyoruz.

Geri bildirimler ve değerlendirmeler sonucunda büyük emekler vererek programını oluşturacağımız XIV. Kongremizin gerek bilimsel gerekse sosyal açıdan doyurucu olacağına gönülden inanıyoruz. Gerçekte bir fuar olan kongremizde herkes o yılki çalışmalarını ortaya koyacak ve meslektaşları ile tartışma fırsatı bulacaktır. Güncel gelişmeleri takip edip, birlikte sorgulayıp, birlikte en iyi çözümleri bulacağımız buluşmamızda yine önceki kongrelerimizde olduğu gibi alanında konularının en iyilerinin sunumlarına şahitlik edeceğiz. Vakfımızın diğer ayağını oluşturan Almanya’daki meslektaşlarımızın yanı sıra dünyanın dört bir yanından katılacak olan meslektaşlarımız ile birbirinden özel oturumlar, canlı cerrahi sunumlar, uluslararası derneklerle düzenleyeceğimiz ortak oturumlar ile oldukça zengin bir bilimsel şölen hazırlamayı planlamaktayız. Kongrenin akışında, her konuda aktif rol alarak fikirlerinizi özgürce paylaşmanız bizi çok mutlu edecektir. Kimse kimseden daha çok bilgi sahibi değildir. Bilge insan, bilim yolunda giden, doğru bilgi birikimini paylaşan, alçak gönüllü ve eğitici olandır!

Kongre programımızda yer alan ve geçen yıllardaki yoğun ilgi nedeniyle devam ettirdiğimiz, sertifikaya edilen “Spesifik Kurslar” ile bilgilerimizin yanı sıra becerilerimizi de geliştireceğiz. Genç meslektaşlarımız için önem arz eden, uluslararası bir toplantıda sözel sunum yapma imkanı yaratarak onları bir adım ileriye taşıyacağımıza inanıyoruz.

Katılımcılarımızın, kongremize ev sahipliği yapacak olan Titanic Mardan Palace Otel’inden memnun ayrılacaklarını umut ediyoruz. Bu otel, hem bilimsel tesislerinin yeterliliği, hem de sosyal alanlarının benzersiz oluşu ile 2022’de, 27. senemizde, sizlere yakışan ayrıcalıklı bir kongre merkezi olacaktır.

28 Mayıs-1 Haziran 2022 tarihlerinde XIV. Türk-Alman Jinekoloji Kongresi’nde buluşmak dileğiyle...



Prof. Dr. Cihat Ünlü
Kongre Başkanı



Prof. Dr. Peter Mallman
Kongre Başkanı

**14. TÜRK ALMAN JİNEKOLOJİ KONGRESİ
DÜZENLEME KURULU****BAŞKANLAR**

Cihat Ünlü, İstanbul

Peter Mallmann, Köln

ONURSAL BAŞKAN

Camran Nezhat, San Francisco

KONGRE BİLİMSEL SEKRETERİ

Yusuf Üstün, Ankara

DÜZENLEME KURULU

L. Cem Demirel, İstanbul

M. Faruk Köse, İstanbul

Mete Güngör, İstanbul

Yaprak Üstün, Ankara

Batuhan Özmen, Ankara

Erol Tavmergen, İzmir

Kubilay Ertan, Leverkusen

Emine Çetin, Hamburg

Özlem Pata, İstanbul

KONGRE SEKRETERYASI

Kongre Düzenleme Kurulu Figür Kongre Organizasyonları ve Tic. A.Ş.'yi, kongrenin resmi acentası olarak belirlemiştir.
Kongre hakkında herhangi bir talebinizde Figür Kongre Organizasyonları ve Tic. A.Ş.'ye başvurmanızı rica ederiz.



19 Mayıs Mah. 19 Mayıs Cad. Nova Baran Center No: 4, 34360, Şişli / İstanbul - Türkiye
Tel: 0 212 381 46 00 Pbx - Faks: 0 212 258 60 78
E-posta: tajeve2022@figur.net

28 Mayıs 2022, Cumartesi

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KURS 1

IVF'te Tartışmalı
Konular Kursu

KAHVE ARASI

IVF'te Tartışmalı
Konular Kursu

ÖĞLE YEMEĞİ

IVF'te Tartışmalı
Konular Kursu

KURS 2

Obstetrik Ultrason
Kursu

ÖĞLE YEMEĞİ

Obstetrik Ultrason
Kursu

KAHVE ARASI

Obstetrik Ultrason
Kursu

KURS 3

Kadın Genital Estetik ve
Fonksiyonel Cerrahisi &
Seksoloji Kursu

KAHVE ARASI

Kadın Genital Estetik ve
Fonksiyonel Cerrahisi &
Seksoloji Kursu




ÖĞLE YEMEĞİ


Kadın Genital Estetik ve
Fonksiyonel Cerrahisi &
Seksoloji Kursu

KAHVE ARASI

Kadın Genital Estetik ve
Fonksiyonel Cerrahisi &
Seksoloji Kursu

29 Mayıs 2022, Pazar				
	SALON 1	SALON 2	SALON 3	SALON 4
09:00	KEYNOTE KONUŞMA			
09:10				
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09:50	Üreme Tıbbında Cerrahi	PKOS	Menopoz, Jinekoloji	
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11:00	KAHVE ARASI			
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11:20	UYDU SEMPOZYUMU 1			
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12:00				
12:10	Yüksek Riskli Gebelik ve Maternal Mortalite	Fertilitenin Korunması	Sözel Bildiriler	
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13:20	ÖĞLE YEMEĞİ			
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14:10	Obstetrik Ultrason	Endometriozis	Sözel Bildiriler	Sözel Bildiriler
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15:20	KAHVE ARASI			
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17:00	Endoskopik Cerrahi	IVF	Sözel Bildiriler	Sözel Bildiriler
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30 Mayıs 2022, Pazartesi							
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09:00	KEYNOTE KONUŞMA						
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09:50	IVF	Obstetrik	Endoskopik Cerrahi	Sözel Bildiriler			
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11:00	KAHVE ARASI						
11:10	UYDU SEMPOZYUMU 3 						
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12:00	Fetal Tarama	Adneksiyal Kitleler ve Over Kanseri	Jinekoloji	Sözel Bildiriler			
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13:00	ÖĞLE YEMEĞİ						
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13:50	Fetal Cerrahi	Pelvik Organ Prolapsusu	Almanya'da Kadın Hastalıkları ve Doğum Fellowship Programları	Sözel Bildiriler			
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14:50	UYDU SEMPOZYUMU 4 						
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31 Mayıs 2022, Salı							
	SALON 1	SALON 2	SALON 3	SALON 4			
09:00	KEYNOTE KONUŞMA						
09:10							
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09:30	Derin Endometriozis	IVF'te Zorluklar	Jinekoloji	Sözel Bildiriler			
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11:00	KAHVE ARASI						
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11:20	UYDU SEMPOZYUMU 5  ABDİİBRAHİM						
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11:40	Yüksek Riskli Gebelikler	Jinekolojik Onkolojide Güncel Yaklaşımlar	Sözel Bildiriler	Sözel Bildiriler			
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13:00	ÖĞLE YEMEĞİ						
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13:20	IVF Başarısı	IVF	Sözel Bildiriler	Video Bildiriler			
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14:40	Üriner İnkontinans	Onkoloji	Sözel Bildiriler	Video Bildiriler			
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16:00	KAHVE ARASI						
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16:20	Üriner İnkontinans				Onkoloji	Sözel Bildiriler	Video Bildiriler
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1 Haziran 2022, Çarşamba				
	SALON 1	SALON 2	SALON 3	SALON 4
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09:30			Akılcı ilaç Kullanımı	
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SÖZEL BİLDİRİLER

SS-001 [İnfertilite]

Efficacy of vaginal administration of Lipiodol in the treatment of rat endometriosis model by transtubal passageÇağla Bahar Bülbul¹, Ceyda Sancaklı Usta², Eren Altun³, Özgür Bulmuş⁴, Akın Usta², Ertan Adalı²¹Department of Obstetrics & Gynecology, Balıkesir Atatürk State Hospital, Balıkesir, Turkey²Department of Obstetrics & Gynecology, Balıkesir University, School of Medicine, Balıkesir, Turkey³Department of Pathology, Balıkesir University, School of Medicine, Balıkesir, Turkey⁴Department of Physiotherapy and Rehabilitation, Balıkesir University, Faculty of Health Sciences, Balıkesir, Turkey

AIM: Lipiodol, which contains ethyl esters of iodized fatty acids of poppy seed oil, has been used as an oil-soluble contrast agent for many years. Lipiodol has historically been used in hysterosalpingograms (HSG) because it increases the chance of pregnancy. It has been shown that following HSG with Lipiodol in women with unexplained and endometriosis-related infertility, the chances of natural conception are significantly increased, more significantly in women with endometriosis. The aim of this study was to investigate the effect of vaginal administration of Lipiodol in the treatment of rat endometriosis model by transtubal passage.

Materials & METHOD: This study was performed in Balıkesir University Experimental Animals Laboratory. In this study, 19 albino-wistar rat were used. Experimental endometriosis was performed so that, the right uterine horn was removed, and a piece of the tissue was trimmed using microscissors. The removed endometrial tissue fragment was sutured into the abdominal wall of the same rat. Another experiment was performed under anesthesia one month after the first operation. During this procedure, 3 rats died after anesthesia. The presence of endometrial foci was confirmed. All rats was divided into two groups as Lipiodol (n=9) and control group (n=7). Lipiodol 0.3 mg was administered vaginally once with the help of a catheter. No intervention was made in the control group. All studies lasted for 8 weeks. At the end of the treatment period all rats was sacrificed and eutopic and ectopic endometrial tissue were removed. All tissue samples were fixed in 10% formalin and then with phosphate buffered saline overnight, and stored in 70% EtOH until processing. Processed endometrial tissues were cut at the middle of the tissue samples and embedded into paraffin. Histological sections (5 µm) were stained with Ki-67, VEGF, Bcl-2 and Caspase-3.

RESULTS: The size of endometriotic focus after treatment were 44.199 mm³ in control and 39.098 mm³ in Lipiodol groups. There was no difference between groups in endometriotic focus (p=0.2437) macroscopically. Microscopically, there was no differences between Ki-67 (p=0.4083), VEGF (p=0.4249), Bcl-2 (p=0.3761) and Caspase-3 (p=0.2337) expression in ectopic endometrial tissue of rats.

CONCLUSION: In this experimental study we investigated differential expression of proliferation, apoptosis and anti-apoptotic cell markers in ectopic endometriotic tissue of rats. We found that there was no differences between Ki 67, VEGF, Bcl-2 and Caspas-3 expression in ectopic endometrial tissue of rats.

Keywords: Endometriosis, Lipiodol, Transtubal passage, Rat

SS-002 [Jinekoloji Genel]

The use of shear wave elastography, transvaginal ultrasound and magnetic resonance imaging in the diagnosis of adenomyosisMuhterem Melis Canturk¹, Cenk Yasa¹, Artur Salmaslioglu², Baris Bakir², Erkut Attar³¹Department of Obstetrics and Gynecology, İstanbul Faculty of Medicine, İstanbul University, İstanbul, Turkey²Department of Radiology, İstanbul Faculty of Medicine, İstanbul University, İstanbul, Turkey.³Department of Obstetrics and Gynecology, Faculty of Medicine, Yeditepe University, İstanbul, Turkey

OBJECTIVE: Our objective is to compare the value to transvaginal ultrasound, magnetic resonance imaging and shear wave elastography in terms of adenomyosis and uterine myoma differential diagnosis.

Setting: Academic tertiary center

MATERIALS-METHODS: In this prospective cohort study, the patients who applied to Gynecology and Infertility Outpatient Clinic in İstanbul University Faculty of Medicine between October 2018 and October 2021 due to abnormal uterine bleeding, pelvic pain, infertility were evaluated. The patients who were diagnosed with adenomyosis and uterine myoma according to clinical evaluation were included and grouped. Clinical diagnosis were confirmed with contrast enhanced pelvic magnetic resonance imaging. No histopathological confirmation were included in this study. 34 patients were included in adenomyosis group and 31 patients were included in myoma group. All patients were evaluated with shear wave elastography; 3 regions of interest were selected for each elastographic evaluation. Average shear values were determined automatically; then, minimum and maximum mean shear values were recorded accordingly. Elastography values of both groups were compared in order to detect any statistically significant difference between 2 groups. In addition to elastography evaluation, the compatibility of transvaginal ultrasound and magnetic resonance were evaluated. **FINDINGS:** No significant difference was detected between 2 groups in terms of descriptive characteristics of patient. The minimum mean shear value of the patients in fibroid grup was statistically significant and higher compared to the ones in adenomyosis group. (31.59 vs 25.04 kilopascal, p=0.047). No significant difference was seen between the maximum mean shear values of the both groups. (50.81 vs. 48.16 kilopascal, p>0.05). The ROC curve was created for the minimum mean shear value in adenomyosis diagnosis. (AUC: 0.66) and the cut-off point was set as >23.7% (sensitivity 80.65%, specificity 55.88%) as minimum mean shear value in terms of adenomyosis diagnosis. A significant correlation was drawn between MRI and TVUS imaging (kappa:0.96 CI 0.9-1.0). The sensitivity and specificity of TVUS were determined as 100% and 96.8% and positive predictive value was determined as %97.1 for adenomyosis group. **CONCLUSION:** On the contrary of maximum mean shear values, the minimum mean shear values of adenomyosis and myoma group were statistically significant. In order to clearly discriminate these two pathologies with the use of shear wave elastography, future studies with higher number of participants should be established.

Keywords: Shear wave elastography, transvaginal ultrasonography, magnetic resonance imaging, adenomyosis, fibroid

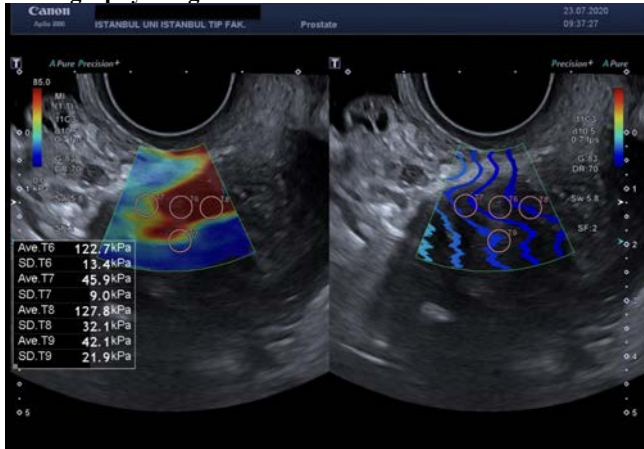
Correlation between MRI and TVUS in terms of diagnosis

Correlation between MRI and TVUS in terms of diagnosis

		MRI Diagnosis			p
		Adenomyosis	Fibroid	Total	
		n (%)	n (%)	n (%)	
TVUS Diagnosis	Adenomyosis	34 (52,3%)	1 (1,5%)	35 (53,8%)	1,000
	Fibroid	0 (0%)	30 (46,2%)	30 (46,2%)	
	Total	34 (52,3%)	31 (47,7%)	65 (100%)	

Mc Nemar Test

Elastography image



Elastography image of a patient with the diagnosis of adenomyosis in our study. Shear wave images are seen on the right, and the lesion schematized according to tissue stiffness on the left. The average shear values in the measured areas of interest are given in kilopascal in terms of Young's modulus.

Elastography results of Adenomyosis and Fibroid groups

Elastography results of adenomyosis and fibroid groups

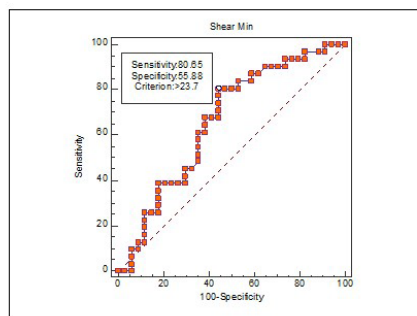
		Adenomyosis (n=34)	Fibroid (n=31)	Total (n=65)	p
Shear Min	Mean±SD	25,04±14,07	31,39±11,73	28,16±13,32	0,047*
	Min-Max	7,3-59,8	9,8-56,6	7,3-59,8	
Shear Max	Mean±SD	50,81±27,22	48,16±10,54	49,55±20,88	0,602
	Min-Max	15,6-139,4	25,6-65,2	15,6-139,4	

Student t test

*p<0.05

ROC CURVE for minimum mean shear value in fibroid group

Cut off point for diagnosis of fibroid



ROC curve

(AUC:0.66)

SS-003 [Jinekoloji Genel]

Comparison Of The Medical Treatment Of Endometriosis With SF-36 quality of life scale, Female sexual function index and Beck anxiety inventory Measurements: A Cohort Study -

Aslihan Yurtkal

Department of Gynecology and Obstetrics, Kafkas University Medical Faculty, Kars, Turkey

OBJECTIVE: Endometriosis is one of the most frequent gynecologic disorders and is described as tissue that usually lines the inside of the uterus, the endometrial gland, and stroma grows outside the uterus. The pathognomonic symptom of endometriosis is pelvic pain. The recommended pain medications are oral hormonal contraceptives, progestin therapy, danazol, gonadotropin-releasing hormone analogs, non-steroidal anti-inflammatory drugs, and aromatase inhibitors. In this study, we aimed to compare the efficiency of over costing dienogest and low-cost oral contraceptives regarding by considering the SF-36 quality of life scale, Female sexual function index and Beck anxiety inventory in the patients with endometriosis which is a chronic disease that requires a lifelong management plan. **Study Design:** In our study, 160 18-45 years old patients presented to our institution's gynecology and obstetrician department for various complaints during two years and get endometriosis diagnoses were included. Patients were divided into three groups (20 patients in each medication group) according to given medication; cyclic dienogest (Visanne) or 0.03 mg ethinylestradiol combined with 2 mg dienogest (Dienille) or estradiol valerate combined with 2 mg dienogest (Qlarista). SF-36 quality of life scale, Female sexual function index and Beck anxiety inventory assessments were recorded at Pre-treatment and sixth cycle control.

RESULTS: There was no significant difference between drug groups in terms of Education Status, BMI, Family History, Smoking, Alcohol consumption, age, age at menarche, menstruation pattern, duration of menstruation, infertility, gestational status, job loss due to pain complaints, operation, and MRI findings (p>0.05). There was no significant difference between the drug groups regarding the quality of life before and after treatment. (p>0.05). There was no significant difference between drug groups regarding Female sexual function index and Beck anxiety inventory findings. (p>0.05).

CONCLUSION: Evaluating the data we have, the efficacy and success of the treatment protocols were the same. It seems more logical to prefer cost-effective OC treatments with a low side-effect profile than high-cost DNG. Following the guidelines accepted step therapy in treating mild or moderate endometriosis, cyclic OC may be recommended as first-line therapy.

Keywords: Female sexual function index, Beck anxiety inventory, SF-36 Quality of Life Scale, Oral Hormonal Contraceptives, Dienogest Endometriosis

SS-004 [Endoskopi]

Laparoscopic retroperitoneal approach in deep infiltrating endometriosis

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Department of Obstetrics and Gynecology, Acibadem University
Atakent Hospital, Küçükçekmece, İstanbul, Turkey.

OBJECTIVE: The aim of this surgical video is to demonstrate the anatomic landmarks and steps of laparoscopic retroperitoneal surgery in deep infiltrating endometriosis

METHODS: We aimed to demonstrate a step-by-step explanation of a surgical case-report of laparoscopic retroperitoneal surgery in deep infiltrating endometriosis using a video.

RESULTS: Endometriosis, a chronic disease in which endometrium-like tissue grows outside the uterus and on other organs. The surgical management of deep infiltrating endometriosis is a real challenge for the gynecologists. We report the case of a 36-year-old woman with a 6-year history of pelvic pain and diagnosed with bilateral endometrioma 5 years ago. In annual exam, we observed a palpable, painful rectovaginal nodule during examination. The patient had no previous history of birth or pelvic surgery.

CONCLUSION: In our experience, the management of deep infiltrative endometriosis requires accurate diagnosis, minimally invasive approach, experienced surgeons, appropriate surgical instruments, and thorough dissection of retroperitoneal anatomic landmarks. We believe this video will be of help in recognizing important structures in retroperitoneum and surgical technique in treatment of deep pelvic endometriosis.

Keywords: Deep endometriosis, Laparoscopic surgery, Retroperitoneum.

SS-005 [İnfertilite]

The Reproductive Outcomes Following Oocyte Pick-Up in Infertile Couples of Advanced Maternal Age Undergoing Assisted Reproduction

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AIM: To evaluate the reproductive outcomes in women over the age of 40 undergoing assisted reproductive techniques (ART) who have reached oocyte pick-up (OPU) stage.

METHOD: This was a retrospective cohort study conducted at a university ART center between September 2021 and April 2022. Infertile couples where female age was 40 years and beyond were included in the study. Women undergoing ART for oocyte cryopreservation and ART cycles that could not reach OPU stage were excluded. A total of 81 ART cycles were eligible during the study period. The ART cycle characteristics and OPU outcomes were derived from hospital records.

RESULTS: The median (25th-75th percentile) female age were 43 (41-45). The median duration of infertility was 3 (1-6) years. The median anti-Müllerian hormone level was 0,31 (0,12-0,65) ng/ml. Regarding cycle characteristics; median duration of stimulation was 9 (7-11) days. Both oral stimulating agents (clomiphene citrate and/or letrozole) and gonadotropins were used in 81% of the cycles. In 59% percent of the cycles, endometrial thickness on trigger day was less than 7 mm. The median estradiol level on trigger day was 358 (157-808) pg/ml. The total number of follicles on trigger day was 3 (1-4) and the number of follicles above 14 mm was 2 (1-3). Premature ovulation occurred only in 1 case. No oocytes were recovered in 18 (22%) cases. No mature oocytes were found in 4 (5%) cases. Total fertilization failure occurred in 9 (11%) cases. Embryo arrest occurred in 4 (5%) cases. In 46 (57%) cases, there was at least 1 embryo available either for fresh transfer or cryopreservation. In 22 cases, fresh embryo transfer was performed and in 24 cases embryo cryopreservation was performed. Of 22 cases where fresh embryo transfer was performed, there were 3 clinical pregnancies. Therefore, clinical pregnancy rate was 14%.

CONCLUSION: The reproductive outcomes following ART are poor for couples with advanced maternal age even if they reach oocyte pick-up stage.

Keywords: advanced maternal age, assisted reproductive technology, infertility, oocyte pick-up

SS-006 [İnfertilite]

Increasing the gonadotrophin dose after commencement of cetrorelix has positive impact on cumulative live birth rate in GnRH antagonist down-regulated ICSI cycles

Koray Görkem Saçın¹, Yavuz Emre Şükür, Cem Somer Atabekoğlu
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Aim: The aim of this study was to assess the impact of gonadotrophin dose increment after commencement of cetrorelix on cycle outcome in GnRH antagonist down-regulated intracytoplasmic sperm injection (ICSI) cycles.

Methods: A retrospective cohort study was conducted. Data of infertile patients who underwent GnRH antagonist down-regulated controlled ovarian stimulation and ICSI between December 2018-January 2020 were reviewed. The study group consisted of the patients whose gonadotrophin dose was increased after commencement of cetrorelix and the control group consisted of patients who continued with constant dose gonadotrophins after commencement of cetrorelix. The groups were compared regarding demographics, cycle characteristics, and clinical outcome data. The main outcome measure was cumulative live birth rate.

Results: A total of 377 patients who underwent GnRH antagonist down-regulated ICSI cycle were assessed for eligibility and 272 were included in to the final analysis. There were 119 and 153 patients in the study and control groups, respectively. The mean age, body mass index, distribution of infertility etiologies, and baseline hormonal parameters were similar between the study and control groups. The median number of mature oocytes was significantly higher in the study group than control group [6 (8) vs. 6 (8), respectively; $P=0.006$]. Similarly, the median number of embryos was significantly higher in the study group than control group [2 (3) vs. 2.5 (3), respectively; $P=0.003$]. The live birth rate per frozen embryo transfer was similar between the groups. The cumulative live birth rate was significantly higher in the study group than the control group 47.1% vs. 24.8%, respectively; $P<0.001$.

Conclusion: In GnRH antagonist down-regulated ICSI cycles, gonadotrophin dose increment after commencement of cetrorelix provides more mature oocytes and embryos and results with higher cumulative live birth rate.

Keywords: Controlled ovarian stimulation, cumulative live birth rate, GnRH antagonist, gonadotrophin dose

SS-007 [İnfertilite]

The comparison of compulsory versus elective single blastocyst transfer in regard to in vitro fertilization success, obstetrics and perinatal outcomes

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AIM: To evaluate in vitro fertilization (IVF) success and obstetrics and perinatal outcome between elective single blastocyst transfer (eSBT) and compulsory single blastocyst transfer (cSBT) and either type of SBT may be preferable over the other.

MATERIAL-METHODS: A total of 373 fresh single blastocyst embryo transfers were included retrospectively. Participants were divided into two groups on the basis of available embryo number: SBT when only one blastocyst available was accepted as the cSBT group ($n=76$) and SBT with elective transfer of one embryo was accepted as the eSBT group ($n=297$). Agonist or short antagonist protocol with recombinant or menopausal gonadotropin were performed for ovarian stimulation. Human chorionic gonadotrophin (hCG) or dual trigger was administered for final maturation and oocyte pick-up was performed 36 hours after trigger. Blastocysts were graded on the basis of Gardner criteria. Fresh one blastocyst was transferred under ultrasound guidance. Vaginal progesterone was used for luteal support. Implantation, clinical pregnancy, live birth and abortion rates, gestational complications, anthropometric measures of neonates, admission to neonatal intensive care unit (NICU) and the presence of congenital anomaly were noted.

RESULTS: Maternal age, the number of cycle performed were increased ($p<0.0001$, $p=0.001$, and $p=0.002$, respectively) and antimüllerian hormone level was decreased in cSBT group compared to eSBT group ($p<0.0001$) (Table 1).

Ovulation trigger agent was different between the groups ($p=0.01$). hCG was performed for ovulation trigger in 54.9% of eSBT group and 38.2% of DBT group, dual trigger was performed in 45.1% of eSBT group, 61.8% of cSBT group. Estradiol levels, the number of metaphaseII and fertilised oocyte were higher in eSBT group compared to cSBT group ($p<0.0001$, $p<0.001$, and $p<0.0001$, respectively). The transferred embryo quality was also different between eSBT and cSBT groups ($p<0.0001$). In eSBT group 91.9% of transferred embryos were top quality, however in cSBT group 31.6% of transferred embryos were top quality (Table 2). The two subpopulations had similar rates of clinical pregnancy, and abortion per blastocyst transfer. Live birth rate per blastocyst was decreased in cSBT (33.3%) group compared to eSBT group (46.3%) however, the difference was not significant ($p=0.05$). Mean gestational week at delivery, delivery type, the incidence of gestational complications and the percentage of having a fetus with congenital anomaly per delivery were comparable between eSBT and DBT groups (Table 3).

CONCLUSION: Clinical pregnancy, live birth and abortion rates and obstetrics and perinatal outcome after IVF are not associated with elective or compulsory blastocyst transfer. Whether mandatory or elective, IVF success cannot be affected after obtaining a blast once.

Keywords: Elective single blastocyst transfer, compulsory single blastocyst transfer, in vitro fertilization

Table 1. Demographic features and baseline characteristics between compulsory single blastocyst transfer (cSBT) and elective single blastocyst transfer (eSBT) groups

	eSBT (n=297)	cSBT (n=76)	p value
Maternal age (years)	29.59 ± 4.09	33.54 ± 6.01	<0.0001
BMI (kg/m ²)	25.29 ± 4.5	26.08 ± 4.71	0.1
Duration (months)	57.17 ± 42.765	57.57 ± 54.68	0.9
Cycle (n)	0.29 ± 0.98	0.79 ± 1.94	0.002
AMH (ng/ml)	2.74 ± 2.54	1.44 ± 1.49	<0.0001
Etiology of infertility (n, %)			0.2
Female	64/297 (21.5%)	16/76 (21.1%)	
Male	115/297 (38.7%)	26/76 (34.2%)	
Mix	21/297 (7.1%)	4/76 (5.3%)	
Unexplained	95/297 (32%)	27/76 (35.5%)	
Genetic	2/297 (0.7%)	3/76 (3.9%)	

Table 2. Cycle characteristics and oocyte retrieval parameters between compulsory single mbryo transfer (cSBT) and elective single embryo transfer (eSBT) groups

	eSBT (n=297)	cSBT (n=76)	p value
Induction protocol (n, %)			
Antagonist	271/297 (91.2%)	74/76 (97.4%)	0.08
Long	26/297 (8.8%)	2/76 (2.6%)	
Ovulation trigger agent (n, %)			
hCG	163/297 (54.9%)	29/76 (38.2%)	0.01
Dual	134/297 (45.1%)	47/76 (61.8%)	
Total hMG dose (IU)	1492.45 ± 1171.71	1211.57 ± 1056.47	0.3
Total FSH dose (IU)	1975.84 ± 619.161	1979.62 ± 607.339	0.9
Estradiol level on trigger day (pg/ml)	2521.49 ± 1699.03	1244.41 ± 1107.02	<0.0001
Methaphase II (n)	10.68 ± 5.65	4.57 ± 3.91	<0.0001
Fertilised oocyte (n)	9.16 ± 4.93	3.61 ± 3.23	<0.0001
Transferred embryo quality (n, %)			<0.0001
TQ	273/297 (91.9%)	24/76 (31.6%)	
GQ	24/297 (8.1%)	38/76 (50%)	
MQ	0	13/76 (17.1%)	
PQ	0	1/76 (1.3%)	

Table 3. Implantation rates and the obstetrics outcome between compulsory single embryo transfer (cSBT) and elective single embryo transfer (eSBT) groups

	eSBT (n=297)	cSBT (n=76)	p value
Clinical pregnancy rate (n, %)	163/295 (55.3%)	32/75 (42.7%)	0.053
Live birth rate (n, %)	131/283 (46.3%)	25/75 (33.3%)	0.05
Abortion rate (n, %)	39/170 (22.9%)	11/37 (29.7%)	0.4
Multiple pregnancy rate (n, %)	6/144 (4.2%)	2/27 (7.4%)	0.6
Gestational age (days)	265.54 ± 14.32	262.48 ± 24.94	0.3
Delivery type (n, %)			1
NSVD	21/131 (16%)	4/25 (16%)	
C/S	110/131 (84%)	21/25 (84%)	
Pregnancy complications presence (n, %)	24/132 (18.2%)	5/25 (20%)	0.7
Congenital anomaly per pregnancy (n, %)	4/129 (3.1%)	2/25 (8%)	0.2

SS-008 [infertilitel]

Dizygotic twin pregnancy after frozen-thawed single blastocyst transfer: A case report and review of literature

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Introduction: Elective single blastocyst transfer (SBT) is a reasonable option for avoiding multiple pregnancies in patients who undergo assisted reproduction technology (ART) treatment (1). However, there is always the chance of spontaneous pregnancy during the treatment. Therefore, we aimed to report a case of dizygotic twin pregnancy after frozen-thawed single blastocyst transfer and review the literature.

Case: A 39-year-old woman and her 38-year-old husband presented with primary infertility of 1-year duration. The infertility workup was normal, including a normal HSG with patent tubes, normozoospermic semen analysis, and an AMH level of 1.18 ng/mL. Her body mass index (BMI) was 24.3 kg/m². The patient was scheduled to undergo IVF treatment. During the index cycle thirteen oocytes were retrieved, of which seven were MII. All oocytes were fertilized with ICSI (Intracytoplasmic sperm injection). Two good quality blastocysts were transferred without success. The remaining embryo was vitrified. FET (Frozen embryo transfer) in modified natural cycle was performed two months later. A single growing follicle was ovulated with hCG, and embryo transfer was scheduled seven days later, which resulted in a twin pregnancy with two distinct gestational sacs and fetal heartbeats. Dizygotic twinning was confirmed when gender difference was observed at 14 weeks.

Discussion: According to the Society for Assisted Reproductive Technology (SART) data, twin pregnancies from SBTs are mostly monozygotic, but 18% of pregnancies could result from at least two embryos implanting simultaneously (2). Among the 15143 pregnancies resulting from 32600 elective single embryo transfer cycles (fresh and frozen), 249 (1.64%) were twin pregnancies, and 23 (9.2%) were sex discordant. In this cohort, 4551 pregnancies resulted from FET, of which 61 (1.3%) were twins, and 5 (8%) were sex discordant. The results were not analyzed according to the FET preparation protocol. FET transfer performed in a natural cycle more likely results in twin pregnancies due to embryos resulting from spontaneous or induced ovulation. Especially patients with unexplained infertility, as is the diagnosis in our patient were four times more likely to have dizygotic twinning. Intercourse is

customarily not restricted in patients undergoing FET in natural cycle, thus paving the way for unintended twin pregnancies resulting from the fertilization of the spontaneously released egg. Evidence suggests that sexual intercourse potentially assists the implantation process of the transferred embryo due to prostaglandins and growth factors released in the uterine environment (3).

Conclusion: Elective single blastocyst transfer is an effective method to decrease multiple pregnancies. Couples need to be counseled regarding the relative benefits and risks of intercourse in ART cycles where spontaneous conception is possible, resulting in unintended twin pregnancies.

References

- (1) Cutting, Rachel. "Single embryo transfer for all." Best Practice & Research Clinical Obstetrics & Gynaecology 53 (2018): 30-37.
- (2) Vega, Mario, et al. "Not all twins are monozygotic after elective single embryo transfer: analysis of 32,600 elective single embryo transfer cycles as reported to the Society for Assisted Reproductive Technology." Fertility and sterility 109.1 (2018): 118-122.
- (3) Tremellen, Kelton P., et al. "The effect of intercourse on pregnancy rates during assisted human reproduction." Human Reproduction 15.12 (2000): 2653-2658.

Keywords: Assisted reproductive technology, Dizygotic dichorionic-diamniotic twinning, Single blastocyst transfer, Natural cycle

Dizygotic twin pregnancy



Dizygotic twin pregnancy after frozen-thawed single blastocyst transfer

SS-009 [Jinekoloji Genel]

Do we actually need a tenaculum for HSG exams?

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AIM: Histerosalpingography (HSG) is an indirect imaging technique for the uterus and requires visualizing en-face view of the cavity to evaluate both the morphology of the uterus and the cavitory lesions as filling defects.

An ante or retro version of the uterus should be corrected to obtain an en-face image of the cavity. The tenaculum is commonly used to adjust however, the pain scores in patients, who need the tenaculum, are higher, according to the studies published and some patients might insist to be examined even under anesthesia. Additionally, the uterine spasm due to the tenaculum may start or the bleeding complications during or after the procedure might develop.

It is aimed to define the actual rate of the absolute tenaculum requirement for HSG examinations.

METHODS: 764 patients in the tertiary care center were included in the study between January 2021 and March 2022. The technique of HSG: Initially the position of the uterus was evaluated by infusing the water-soluble iodinated contrast media (ICM) after spasmolytic agent, hyosin-N-butyl bromür. If traction was needed a catheter with an insufflated balloon was used. The position of the uterus was checked once more after giving ICM and when the traction with a catheter with a balloon was inadequate, a tenaculum was added to obtain the optimal cavitory en-face image. In the last step of the examination, the balloon of the catheter was deflated to visualize the lower segment of the uterus and cervix. The images of the HSG in the study were obtained with simple plain x-ray equipment due to the facilities of the hospital. Features of the catheter: 5 F, 30 cm in length, with a netted surface balloon, 11,5 mm in diameter, and double separated lumen for the ICM and balloon sufflation.

HSG examinations were performed by the same team; 2 nurses experienced in HSG examinations for more than 7 years and an x-ray technologist. The written informed consent for the examinations was obtained from the patients. The lower part of the consent document was filled by the team about the traction necessity, the method of traction, the pain score on a 10 scale and the volume of the ICM used. **Evaluation:** The consent and images of the patients were transferred to the PACS system. HSG examinations were evaluated by the authors of the study retrospectively about the en-face views of the cavities and optimal 764 exams were determined, in which traction necessity and the methods were documented.

RESULTS: The traction was performed in 255 of 764 patients (33 %) with the ballooned catheter in 163 (21 %) and with the tenaculum only in 92 (12 %) patients were needed. The HSG examinations were completed in 67 % of the patients (509) without any traction.

CONCLUSION: HSG examinations should not be started with any type of traction, if needed ballooned catheter might be tried initially to achieve maximum patient comfort and reduce the related complications.

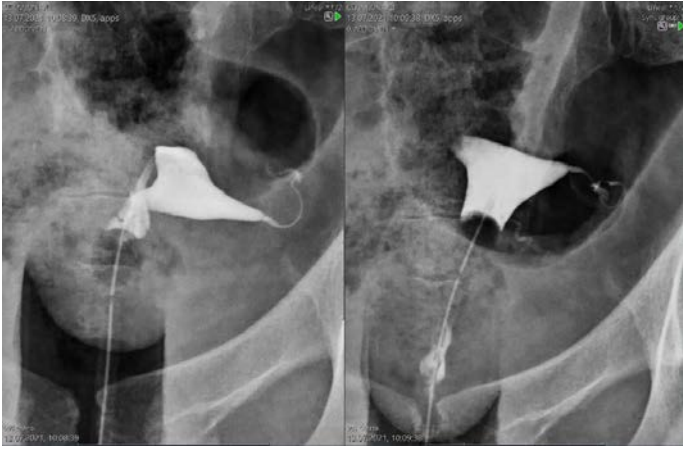
Keywords: Histerosalpingography, Infertility, Technique

The en-face view of the cavity after traction with a catheter



The en-face view of the cavity after traction with a catheter in a patient with fully anteverted uterus.

Traction with a catheter ballooned



The uterin cavity en-face view after traction with a catheter

SS-010 [Obstetri Genel]

How does ERAS protocol work on cesarean section patients? (HERMES Study)

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OBJECTIVE: The main objective of this study is to assess the effect of enhanced recovery after surgery (ERAS) protocol for cesarean deliveries (CD) on postoperative outcomes.

METHODS: This multicenter prospective cohort study was conducted at 6 different centers, between September 2020 and March 2021. The study protocol was approved by Uludağ University Faculty of Medicine Clinical Research Ethics Committee at the beginning of the study (approval number: 2020-15/18). Eligible women who underwent both planned and unplanned CD were randomized to ERAS or control group. The primary outcome was time to the first passage of flatus following CD. Secondary outcomes included postoperative pain score, postoperative complications and patient satisfaction. The protocol included postoperative early oral intake with ice cream and coffee, multimodal analgesia and antiemetic medications, early urinary catheter removal, early discontinuation of maintenance intravenous fluids, and early ambulation. All patients in the Hermes group were discharged 24-36 hours after CD, and women in the control were discharged 48 hours postoperatively.

RESULTS: A total of 448 patients were included in the study: 233 in the Hermes group and 215 in the control. There were no differences in baseline demographics, medical comorbidities between the two groups. The median time to the first passage of flatus in the Hermes group was 10 hours, in the control it was 18 hours, and there was a significant difference between the groups ($p<0.001$). The VAS scores at the 1st, 6th and 24th hours postoperatively were significantly higher in the control group ($p<0.001$, $p<0.001$ and 0.028, respectively). Median patient satisfaction scores did not differ between both groups ($p=0.08$). There was no difference in the frequency of total postoperative complications and readmission to hospital rate between both groups ($p=0.604$ and 0.547, respectively).

CONCLUSION: The ERAS protocol, aiming for rapid recovery including early serving ice cream and coffee in early postoperative period enables early discharge with faster return of bowel functions. The implementation of ERAS protocol for planned and unplanned CD appears to be safe and effective.

Keywords: Enhanced recovery after surgery, Cesarean delivery, Maternal outcomes

Preoperative and Postoperative Outcomes of Hermes and Control Groups

	Hermes group (n=233)	Control group (n=215)	p
Preoperative fasting time(hour)	8 (2-16) / 205.2	8 (3-24) / 245.4	0.001
Bowel preparation	24(10.3)	20(9.3%)	0.845
Thromboprophylaxis	16(6.9%)	7(3.26 %)	0.133
Antibiotic prophylaxis*	205(87.9%)	205(95.3%)	0.58
Operation duration (minute)	30(15 -90) / 207.3	35 (20-120) /243.1	0.003
Postoperative mobilisation (hour)	6 (2-7) / 172.7	6 (6-12) / 280.5	<0.001
Removal time of urinary catheter (hour)	6 (2-20) /136.7	8 (6-28) /319.5	<0.001
Time to the first passage of flatus (hour)	10 (2-30) / 164.4	18 (3-30) / 289.5	<0.001
Removal time of intravenous catheter (hour)	22 (11-48) / 127.6	48 (15 -72) /329.4	<0.001
Postoperative hemogram value(g/dL)	10.41 ± 1.23	10.28 ± 1.12	0.249
Hemogram change percentage (%)	-0.07 (-0.35- 0.17)	-0.08 (-0.34- 0.15)	0.805
Time to the first clear liquid diet (R1) (hour)	2 (2-6) /122.5	6 (2-10) /334.9	<0.001
Time to the first semi-solid diet (R2) (hour)	2 (2-8) /121.9	8 (2-21) /335.6	<0.001
Time to the first solid diet (R3) (hour)	6 (2-15) /123.0	20 (6-32) /334.4	<0.001
Postoperative 1. hour VAS	4 (0-10) /158.5	6 (0 -10) /296.1	<0.001
Postoperative 6. hour VAS	3 (0-7) /172.7	5 (2-9) /280.6	<0.001
Postoperative 24. hour VAS	2 (0-9) /212.3	2 (0-9) /237.6	0.028
Patient's satisfaction score*	5 (2 -5) / 232.8	5 (2 -5) / 215.4	0.08

Data are presented as median (min-max) / mean rank and n (%) for nominal variables. Hemogram change percentage (%)= (postoperative hemogram value- preoperative hemogram value)/ preoperative hemogram value. Antibiotic prophylaxis administered as recommended by American College of Obstetricians and Gynecologists Guidelines VAS- Visual Analog Score. Data are presented as median (min-max)/ mean rank *Likert Scale (1 is poor and 5 is excellent)

SS-011 [Obstetri Genel]

Evaluation of postpartum blood test requirement in the mother-friendly hospital model: Tertiary center experiences

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AIM: It should be kept in mind that pregnancy and childbirth are physiological processes and are natural, normal and healthy functions

of the body. Meetings covering topics such as pregnancy, childbirth and breastfeeding with the joint efforts of more than 26 organizations in the United States, which lasted for about 3 years, formed the basis of the evidence-based 'Mother-Friendly Birth Initiatives'. In 1996, The Coalition for Improving Maternity Services –CIMS brought the concept of 'mother-friendly hospital' to the agenda, which has been implemented in hospitals in many European countries including our country, in recent years. Mission of CIMS consist of many principles such as reducing the number of cesarean sections, encouraging vaginal birth, increasing evidence-based practices, encouraging women's participation in their own birth. Its basic philosophy is naturalness in the birth process. In our study, we aimed to investigate the necessity of postpartum hemogram follow-up in deliveries without a pathological process and clinical findings after birth. METHOD: The data of primiparous pregnant women who applied to SBU Ankara Training and Research Hospital between March 2021 and March 2022 and had vaginal births were retrospectively scanned. The data of 169 women was compared in total whose data were fully accessible; 95 pregnant women (Group 1) without pathological process and 74 pregnant women (Group 2) hemogram was requested because of clinical observation suspicion, postpartum hemorrhage, anemia, episiotomy desuria. Gravida, body mass index (BMI), age, smoking, comorbidity, gestational week at delivery room entrance, reason for entering delivery room, delivery room entrance hemogram, birthweight and gender were recorded by scanning patient files and hospital information system. The data were analyzed by descriptive statistical methods. RESULTS: In our tertiary center, there were 1029 vaginal births between March 2021 and March 2022, 252 of these were primiparous births. The data of 95 pregnant women in Group 1 and 74 pregnant women in Group 2, whose data were fully accessible were compared. There was only a significant difference between Group 1 and Group 2 in terms of age. (p<0,05) There was no significant difference between the groups in terms of other demographic, clinical and newborn data. (Table 1) In group 2 it was observed that hemogram follow-up was requested most frequently due to clinical observation suspicion (40.6%) and postpartum bleeding (37.8%). Blood transfusion was applied to 15 women (20.3% of Group 2). (Table 2). There was no maternal or infant death in both groups, and no significant difference was observed between newborns hospitalized in the neonatal intensive care unit. CONCLUSION: In our study in which the data of primiparous pregnant women who were given more medical intervention in the follow-up of labor, maternal and neonatal morbidity and mortality were not observed in either group. There was no difference between the groups in terms of conditions that may pose a risk of postpartum hemorrhage (additional disease, smoking). We think that postpartum routine complete blood count test may not be desired in pregnant women who does not have a pathological process and clinical findings after delivery. In addition, postpartum hemoglobin value may be incorrect due to intravenous hydration. We think that our study which supports the practice of 'Mother-Friendly Hospital' should be reinforced by multi-center studies with more patients.

Keywords: mother-friendly hospital, primiparous birth, blood test, hemoglobin, vaginal birth

Table 1. Demographic and clinical data of pregnant women included in the study

	Patient for Whom Hemogram Is Not Requested (n=95) (56,2%)	Patient for Whom Hemogram is Requested (n=74) (43,8%)	p
Age (mean, standard deviation)	21,48 ± 3,84	22,80 ± 4,64	0,04*
Gravida (min-max)	1 - 3	1 - 2	0,78***
Body Mass Index (kg/m ²) (mean, standard deviation)	26,07 ± 3,58	26,40 ± 4,45	0,59*
Smoking (number, %) Yes No	2 (2,1%) 93 (97,9%)	1 (1,4%) 73 (98,6%)	0,71**
Additional disease (number, %) None GDM GHT Thyroid disorder	89 (93,7%) 2 (2,1%) - 4 (4,2%)	66 (89,2%) 3 (4,1%) 2 (2,6%) 3 (4,1%)	0,36**
Gestational week at delivery room entrance (mean, standard deviation)	38,9 ± 1,20	38,8 ± 1,25	0,74*
Reason for entering delivery room (number, %) Contraction Membran Rupture Surmatuity	75 (78,9%) 16 (16,8%) 4 (4,3%)	50 (67,6%) 18 (24,3%) 6 (8,1%)	0,22**
Prepartum hemogram (gr/dl) (mean, standard deviation)	12,03 ± 1,23	11,62 ± 1,80	0,09*
Birthweight (gr) (mean, standard deviation)	3077,47 ± 364,02	3137,26 ± 429,84	0,33*
Newborn gender (number, %) Female Male	42 (44,2%) 53 (55,8%)	37 (50%) 37 (50%)	0,45**

*Student-T Test **Chi-Square Test ***Mann Whitney-U Test GDM; Gestational Diabetes Mellitus GHT; Gestational Hypertension

Table 2. Clinical data of pregnant women for whom hemogram is requested

Reason for request (number, %)	30 (40,6%)
Clinical suspicion	8 (10,8%)
Episiotomy desuria	8 (10,8%)
History of anemia	28 (37,8%)
Postpartum bleeding	
Postpartum Hb (gr/dl) (mean, standard deviation)	9,94 ± 1,76
Delta Δ Hb (gr/dl) (mean, standard deviation)	1,73 ± 1,22
Blood transfusion	
Yes	15 (20,3%)
No	59 (79,7%)

SS-012 [Obstetri Genel]

Investigation of the level of awareness about folic acid in pregnant women

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AIM: It was aimed to investigate the knowledge of pregnant women who applied to SBU Ankara Training and Research Hospital obstetrics outpatient clinics about the use of folic acid and folic acid-containing preparations in the pregestational period and the first trimester of pregnancy and their role in the development of neural tube defects (NTD).

MATERIAL-METHODS: 200 pregnant women who applied to the obstetrics outpatient clinics of SBU Ankara Training and Research Hospital in January 2022 were asked to fill in a questionnaire containing specific questions about folic acid, and their knowledge levels were investigated. Demographic characteristics such as age, number of pregnancies, education level of pregnant women between the ages of 15-45 were investigated. In addition, it was learned whether that was a planned pregnancy, whether she had heard of folic acid before, whether she used folic acid during pregnancy, if she did, at what stage of pregnancy she started using it, whether she knew which foods contained folic acid, and whether she had information about the relationship between NTD and folic acid.

RESULTS: In our study, the rate of those who had heard of folic acid before was 79.5% (n=159), and 86% of them heard from the doctor, 8.1% from the internet, 4.4% from a relative and 0.6% of them from television. While 18 of the patients (9%) had knowledge about nutrients containing folic acid, 17 of them were highly educated. Although 65% of all cases (n=130) were planned pregnancy, only 10% of all pregnancies had a history of folic acid use (n= 20) starting from the pregestational period and throughout the first trimester. The number of those who did not use folic acid in any period of their pregnancy was 52 (29%). 28 of them had never heard of folic acid, 32 of them (62%) had a low education level, while 20 (38%) had a high school or higher education level. Among those who never used folic acid, only 4 (7.6%) women were working in a job while 48 (92.3%) women were not working.

DISCUSSION: Although its relationship with NTD was defined many years ago and its routine use has been recommended by the World Health Organization for more than 10 years, the information about folic acid and NTD among women in our country is insufficient. The most important factor leading to this result is the lack of knowledge about folic acid. For this reason, it is necessary to increase the education level of women, to ensure that they participate more in the working life. The effort of health professionals, who the patients get the most information about, is important to announce the effect of folic acid on the prevention of NTD to all women of childbearing age (especially initiating folic acid in the pregestational period). It can be considered that social media, which is one of the most important information source today, should be used more effectively in this regard.

Keywords: Folic Acid, Neural Tube Defect, Pregnancy

SS-013 [Obstetri Genel]

Comparison of Maternal and Neonatal Outcomes in the Patients Those Using and Not Using Iron Preparations During Pregnancy

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Objective: Iron deficiency anemia is the most frequent form of anemia in pregnancy and can have serious consequences for both the mother and fetus. The majority of women do not have adequate iron stores to meet the dramatic increase in requirements during the second and third trimester of pregnancy. According to the data of the WHO, it is estimated that approximately 30% of the world population and more than half of the pregnant women in the world are anemic. More than 1/3 of all women in the world also have anemia. For this reason, anemia is a problem that should be handled very seriously in terms of women's health and pregnant health. The aim of this study is to evaluate the pregnant women who are followed up in our clinic and give birth, receiving routine iron supplementation, and pregnant women who do not routinely use iron preparations, in terms of obstetric and neonatal outcomes.

Material-Method: The data of patients who gave birth in our clinic between January 2021 and December 2021 in Ankara Training and Research Hospital were retrospectively scanned from the hospital automation system and patient files. The patients were divided into two groups as unfollowed pregnant women who didn't use iron preparations (Group 1) and followed-up pregnant women who routinely took iron preparations (Group 2). Pre and postnatal Hb levels, obstetric complications, mode of delivery, indications of cesarean section, presence of postpartum hemorrhage, birth weight, gender, 1st and 5th minute Apgar scores, and postpartum NICU (neonatal intensive care Unit) need were recorded and compared between the two groups.

Results: 1182 patients who gave birth in our clinic were included in the study. These patients were divided into two groups as not using iron supplementation (Group 1, n=224) and using iron supplementation (Group 2, n=958). The mean age was 25.90 ± 6.31 years in Group 1 and 27.74 ± 5.97 years in Group 2 ($p=0.598$). Mean weeks of gestation at birth in Group 1 patients were 38.29 ± 2.14 , and this value was 39.2 ± 1.37 in Group 2 patients ($p<0.01$). While the rate of vaginal delivery was 78.4% (n=175) in patients in Group 1, this rate was 57.5% (n=550) in patients in Group 2 ($p<0.01$). Primary cesarean section rates of patients in group 1 were significantly lower than those in group 2 (10.2% vs. 16.2%, $p<0.01$). Birth weight was 3139.25 ± 540.24 in Group 1, and it was found 3255.29 ± 420.28 in Group 2 and it was statistically significant ($p<0.01$). The need for NICU resulted in 9.3 % in both of the two groups.

Conclusion: Although antenatal iron supplementation has been shown to improve maternal hemoglobin levels and thus increase birth week and newborn birth weight, it didn't have a significant effect on neonatal intensive care unit need, Apgar scores and obstetric complications. Strategies should be adopted worldwide in order to prevent and treat anemia, to avoid adverse neonatal and maternal outcomes in postpartum women. We also recommend that iron use at during pregnancy and post-partum period.

Keywords: Anemia, Iron Supplement, Pregnancy

table 1

Table1. Demographic characteristics of patients and mode of delivery

	Patients without iron supplement N=224	Patients with iron supplement N=958	p
Years	25.90 ± 6.31	27.74 ± 5.97	0.598
Gravida	2.86 ± 1.63	2.73 ± 1.49	0.444
Parite	1.70 ± 1.48	1.38 ± 1.19	<0,01
Type of Birth			
Vaginal birth n /%	175 / 78.4%	550 / 57.5%	<0.01
C-section n /%	49 / 21.6%	408/42,5%	
Primary CS	23/ 10.2%	155/16.2%	<0.01

Table1. Demographic characteristics of patients and mode of delivery

table 2

Table 2. Gestational and neonatal outcomes

	Patients without iron supplement N=224	Patients with iron supplement N=958	p
Gestational week at birth	38.29 ± 2.14	39.2 ± 1.37	<0.01
Birth weight	3139.25 ± 540.24	3255.29 ± 420.28	<0.01
Apgar 1. Min	9.04 ± 1.14	9.08 ± 0.89	0.135
Apgar 5. Min	9.71 ± 1.06	9.76 ± 0.78	0.078
Hb levels before birth	10.1 ± 1.69	10.8 ± 1.72	<0.01
Hb levels after birth	9.8 ± 1.59	10.6 ± 1.66	<0.01
Need for NICU	21 / 9.3%	89 / 9.3%	NS
Gestational complications			
GDM	1/0.4%	45/4.7%	0.634
GHT			
PREECLAMPTIA	5/2.2%	14/1,5%	
Placenta previa-placental abruption	1/0.4%	4/0.4%	
IEUX	2/0.9%	5/0.5%	

Table 2. Gestational and neonatal outcomes

SS-014 [Obstetri Genel]

Comparison of Bishop Score and Intrapartum Ultrasound Score in Prediction of Birth Results

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OBJECTIVE: We aimed to predict birth method with Intrapartum Ultrasonography application in patients with low Bishop score, and to compare the obtained data with the current method.

MATERIALS-METHODS: One hundred volunteers with a singleton pregnancy with a Bishop score of ≤ 5 who completed 34-41 weeks of gestation and were interned for labor induction between 8.7.2020 and 8.1.2022, were included in the delivery room of the Izmir University of Health Sciences Tepecik Training and Research Hospital. In our study, patients were evaluated with Intrapartum Ultrasound Score (which determined by measuring angle of progression, mid-line angle, posterior cervical angle, length and elastography of the cervix), and the traditionally used Bishop score. Both scoring systems were compared in terms of predicting birth method and estimated time of delivery.

RESULTS: A total of 100 pregnant women (61 nulliparous, 39 multiparas) were included in the study. One patient had emergency cesarean section after describing eclampsia prodrome findings. Fifty-eight of 99 pregnant women entered active labor phase. While 50 pregnant women had vaginal deliveries, 8 women required cesarean delivery, 4 of them due to fetal distress, 2 due to failure to progress and 2 due to cephalo-pelvic disproportion. Of the 41 pregnant women who could not enter to the active delivery stage and received cesarean indication, 18 had failure to progress, 8 had cesarean section due to cephalo-pelvic disproportion, and 15 had fetal distress. The area under the curve calculated as a result of the ROC curve was found to be higher in Intrapartum Ultrasound Score (AUC=0.62, $p=0.03$) compared to Bishop's Score (AUC=0.55, $p=0.34$). Using the ROC Curve, the cut-off value was calculated for each parameter, and these values were 132,5 degree for the progression angle, 19,5 mm for the cervical length, 102 degree for the mid-line angle, and 126,5 degree for the posterior cervical angle. It is found that women with an IU Score ≥ 7 have delivery in a shorter time than those with a Score <7 (mean labor 797 vs 1346 minutes respectively), but it is not statistically significant ($p=0.055$).

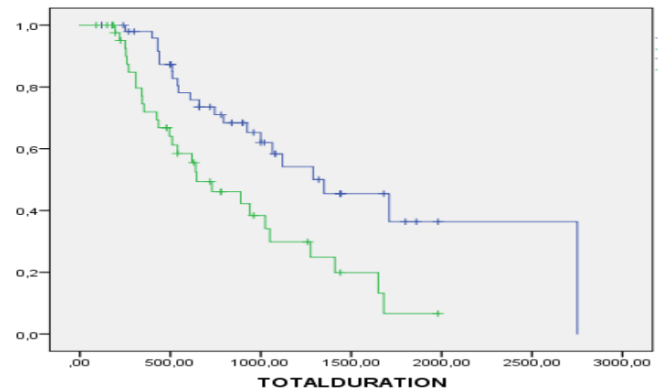
CONCLUSION: Intrapartum Ultrasound Score was found to be superior to Bishop score in predicting birth method. Especially posterior cervical angle is a successful parameter in predicting induction success. Bishop score was found to be statistically superior in estimating the time from induction to delivery.

Keywords: Angle of progression, Bishop score, Cervical length, Labor induction

Comparison of the mean Bishop score and variables of Intrapartum Ultrasound Score

	Vaginal Birth Group (n=50)	C-Section Group (n=50)	p
Bishop Score	2,84 \pm 1,67	3,18 \pm 1,68	0.31
Intrapartum Ultrasound Score	2,84 \pm 2,24	3,78 \pm 1,94	0.02
Angle of Progression	104,40 \pm 19,17	98,86 \pm 17,34	0.13
Cervical Length	29,32 \pm 11,90	33,38 \pm 13,02	0.10
Mid-line Angle	84,32 \pm 20,81	83,78 \pm 18,01	0.89
Posterior Cervical Angle	96,60 \pm 30,90	83,16 \pm 25,48	0.02

Evaluation of Bishop score with survival curve

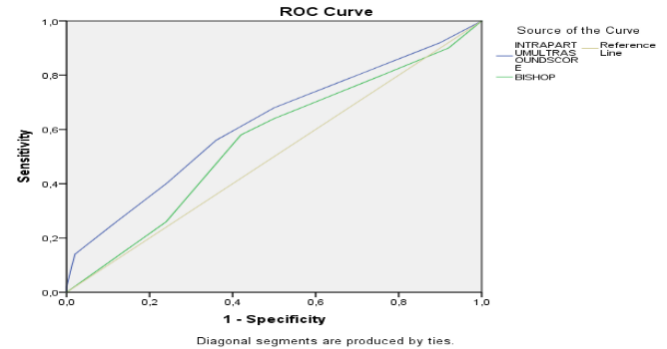


Blue color represents the pregnant women with score <4 , green color ≥ 4

Parameters of Intrapartum Ultrasound Score

Intrapartum Ultrasound Score	0	1	2
Angle of Progression	$<110^\circ$	110-135°	$>135^\circ$
Cervical Length	>40 mm	40-25 mm	<25 mm
Mid-line Angle	$\geq 45^\circ$		$<45^\circ$
Cervical Elastography	kırmızı	turuncu	yeşil
Posterior Cervical Angle	$<90^\circ$	90-100°	$>100^\circ$

ROC curves of Bishop score and Intrapartum Ultrasound Score in predicting induction success



SS-015 [Obstetri Genel]

Analysis of births in Izmir University of Health Sciences Tepecik Training and Research Hospital according to Robson Classification

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OBJECTIVE: In our hospital, which is a tertiary clinic, it was aimed to classify deliveries in the last 5 years according to Robson Scoring and to examine delivery methods according to parity characteristics and cesarean section indications.

MATERIALS-METHODS: All pregnant women who gave birth after the 20th gestational week in Izmir University of Health Sciences Tepecik Training and Research Hospital between 2016 and 2020 were included in the study. Births were classified according to the Robson Scoring System. Continuous data are given as Mean \pm Standard Deviation. Categorical data are given as a percentage (%). Shapiro Wilk test was used to investigate the suitability of the data for normal distribution. One-way analysis of variance (One-Way ANOVA) was used for cases with three or more groups in the comparison of normally distributed groups. The Kruskal-Wallis H test was used for the cases with three or more groups in the comparison of groups that did not conform to the normal distribution. Pearson Chi-Square and Pearson Exact Chi-Square analyzes were used in the analysis of the created cross tables. A value of $p < 0.05$ was accepted as a criterion for statistical significance.

RESULTS: In our study, between 2016 and 2020, it was seen that the dominant mode of delivery was cesarean section as the years progressed, the number of vaginal deliveries decreased, and the number of operative deliveries was low in all years. Cesarean section rates were 52.1%, 51.9%, 52.7%, 54.2%, and 59.6% for the years 2016, 2017, 2018, 2019 and 2020, respectively. The average frequency of cesarean section over all years was 53.84%, 46.03% of vaginal delivery and 0.12% of operative delivery. Due to the increase in cesarean section, Group-3 (Multiparous, no previous uterine scar, singleton, cephalic presentation, ≥ 37 weeks, spontaneous labor) was observed as the dominant group in Robson Scoring until 2020, while Group-5 (Multiparous, having at least one previous uterine scar, singleton, cephalic presentation, ≥ 37 weeks of gestation) was observed in 2020. The most common indication for cesarean section was repeated cesarean section and/or prior uterine surgery, and its frequency was determined as 47.3%. The second most common indication was fetal distress, and its frequency was found to be 12%.

CONCLUSION: The rate of cesarean section in our hospital has been increasing over the years and this rate is above the world average. Examination of births in each relevant institution by grouping them with the Robson Scoring System; Investigating the causes of cesarean section gains importance in terms of placing its indications on more objective criteria.

Keywords: Cesarean section, Delivery, Pregnancy

Robson Classification of Births by Years

ROBSON CLASSIFICATION	2016 (n=9366)	2017 (n=8084)	2018 (n=8051)	2019 (n=6922)	2020 (n=6661)	P
GROUP 1	1620 (17.3%)	1467 (18.1%)	1352 (16.8%)	992 (14.3%)	1150 (17.3%)	<0.001
GROUP 2	1693 (18.1%)	1054 (13.0%)	1083 (13.5%)	851 (12.3%)	497 (7.46%)	
GROUP 3	2448 (26.1%)	2117 (26.2%)	2210 (27.5%)	1940 (28.0%)	1635 (24.5%)	
GROUP 4	446 (4.76%)	551 (6.82%)	410 (5.09%)	445 (6.43%)	601 (9.02%)	
GROUP 5	2085 (22.3%)	2011 (24.9%)	2037 (25.3%)	1794 (25.9%)	1742 (26.2%)	
GROUP 6	33 (0.352%)	26 (0.322%)	10 (0.124%)	3 (0.0433%)	46 (0.691%)	
GROUP 7	13 (0.139%)	18 (0.223%)	4 (0.0497%)	8 (0.116%)	24 (0.360%)	
GROUP 8	114 (1.22%)	134 (1.66%)	121 (1.50%)	81 (1.17%)	87 (1.31%)	
GROUP 9	0 (0%)	0 (0%)	4 (0.0497%)	3 (0.0433%)	2 (0.0300%)	
GROUP 10	914 (9.76%)	706 (8.73%)	820 (10.2%)	805 (11.6%)	877 (13.2%)	

Robson Classification of Cesarean Section Births by Years

ROBSON CLASSIFICATION	2016 (n=4881)	2017 (n=4199)	2018 (n=4245)	2019 (n=3750)	2020 (n=3969)	P
GROUP 1	204 (% 4.18)	143 (% 3.41)	42 (% 0.989)	62 (% 1.65)	678 (% 17.1)	<0.001
GROUP 2	1378 (% 28.2)	915 (% 21.8)	1050 (% 24.7)	807 (% 21.5)	202 (% 5.09)	
GROUP 3	87 (% 1.78)	143 (% 3.41)	39 (% 0.919)	50 (% 1.33)	433 (% 10.9)	
GROUP 4	389 (% 7.97)	345 (% 8.22)	384 (% 9.05)	375 (% 10)	105 (% 2.65)	
GROUP 5	2081 (% 42.6)	2003 (% 47.7)	2034 (% 47.9)	1791 (% 47.8)	1740 (% 43.8)	
GROUP 6	33 (% 0.676)	25 (% 0.595)	9 (% 0.212)	3 (% 0.0800)	46 (% 1.16)	
GROUP 7	11 (% 0.225)	18 (% 0.429)	3 (% 0.0707)	8 (% 0.213)	22 (% 0.554)	
GROUP 8	108 (% 2.21)	126 (% 3.00)	119 (% 2.80)	79 (% 2.11)	86 (% 2.17)	
GROUP 9	0	0	1 (% 0.0236)	1 (% 0.0267)	2 (% 0.0504)	
GROUP 10	590 (% 12.1)	481 (% 11.5)	564 (% 13.3)	574 (% 15.3)	655 (% 16.5)	

SS-016 [Obstetri Genel]

Are tattoos and piercings in pregnant women an important risk factor for prenatal attachment?Nilüfer Akgün¹, Fatma Hicran San¹, Julide Ceren Yıldırım², Nimet Alyörük¹, İrem Erdem Atak², Yusuf Üstün¹¹Ankara Training and Research Hospital, Department of Obstetrics and Gynaecology, Ankara, Turkey²Istanbul University, Department of Psychology, İstanbul, Turkey

BACKGROUND: Permanent tattoos and piercings have gained enormous popularity in recent years. More than one-third of women who have tattoos are young women in reproductive age. Tattoos placed on/into the skin are important in terms of interpersonal relationships, defining self-identity, representing change and prestige, expressing oneself and establishing a connection with his/her life story. It has been reported in some studies that tattooing may be strongly associated with low self-esteem, impulsivity, borderline and antisocial personality disorders, alcohol and psychoactive substance abuse and dependency. Prenatal attachment is a process that begins during pregnancy and promote maternal attachment after the birth. Prenatal attachment is found to be related with age, education level, preconception care, marital satisfaction, psychological well-being, anxiety and depression levels, social support of the mother, number of children, miscarriage history and risk of pregnancy period. Our aim is to examine the relationships among prenatal attachment, psychopathological symptoms, impulsivity, self-harm and self-image of pregnant tattooed/pierced women; and to investigate the effect of these factors on attachment.

METHODS: This prospective cohort study included 73 pregnant women referred to Ankara Education and Research Hospital for pregnancy follow-up. 52.1%(n=38) of the participants who have tattoos were in group 1 and 47.9% (n=35) of participants who have no tattoos were in group 2 (the control group). Pregnant women completed self-reported questionnaires during their second and third trimester. The demographic variables, Barratt Impulsiveness Scale-Short Form, Prenatal Attachment Scale, Edinburgh Postnatal Depression Scale (EPDS), Maternal Attachment Inventory, the Inventory of Statements About Self-Injury, Body Cathexis Scale and The Symptom Checklist scores were compared between groups. Percentage, mean and standard deviation, Kruskal Wallis Variance Analysis, Mann Whitney U test and Spearman correlation analysis were used for statistical analyses. All p <0.05 were considered significant.

RESULTS: Barratt Impulsiveness Scale total and subscale scores showed a statistically significant difference between the tattooed group and control group (p<0.001). Also, in the patient group, as the total impulsiveness scores and motor and attention impulsivity subscale levels increase, prenatal attachment scores were decreased (p<0.05). There was a statistically significant, moderate and negative correlation between prenatal attachment scores and the total psychopathological symptoms in the patient group (r=-0.440, p=0.006) indicating that psychological symptoms may have a negative impact on attachment. Although prenatal attachment scores did not significantly differ between groups, control group participants had a slightly higher score on the scale.

CONCLUSIONS: We found that pregnant women with tattoos tend to be more impulsive compared to controls. However, prenatal attachment

levels were not statistically different between the two groups. On the other hand, in the patient group, a negative correlation between prenatal attachment and impulsiveness was found indicating that tattooing indeed might be a risk factor for the attachment. This is a notable finding that needs further consideration. How will they tolerate and care for the baby with this high impulsivity? In this respect, this study can be accepted as an important preliminary study. Further longitudinal studies are needed to fully understand the relationships among prenatal and postnatal attachment, impulsivity and tattooing.

Keywords: tattoo pregnancy, prenatal attachment, impulsiveness

Table -1: Demographic Variables of the groups

		Control group (n=35)		Tattoo in pregnancy (n=38)	
		n	%	n	%
Age		26.7±6.6		26.3±5.9	
Number of Tattoos		-		2 (1)	
Gravida		2 (1)		2 (1)	
Education status	Primary school	6	17.1	11	28.9
	Middle school	2	5.7	12	31.6
	High school	13	37.1	6	15.8
	University	13	37.1	9	23.7
	No Education	1	2.9	-	-
Mood during tattooing	Happy			29	76.3
	Nervous			4	10.5
	Reactional			2	5.3
	Scars from incisions			3	7.9
Pregnancy Problems	No	22	66.7	23	60.5
	Abortus Imminens	8	24.2	5	13.2
	Preterm Labour	3	9.1	5	13.2
	Preeclampsia	-	-	2	5.3
	Diabetes Mellitus	-	-	3	7.9
Fear of labour pain	Yes	25	71.4	26	68.4
	No	10	28.6	12	31.6
Financial Difficulty	No Difficulty	14	40	15	39.5
	Medium	11	31.4	11	28.9
	Very Difficult	10	28.6	12	31.6

Table -2: Characteristics of pregnant women, overall and proportion of groups

	Control (n=35)	Tattooed (n=38)	p-values
Prenatal Attachment Scale	61.2±11.5	59.2±12.9	0.502
Barratt Impulsiveness Scale	27.5±6.6	35.8±7.1	p<0.001
Non- planning Impulsivity	9.7±2.9	12.8±2.8	p<0.001
Attentional Impulsivity	8.5±2.5	11.3±3.3	p<0.001
Maternal Attachment Inventory	88±12.3	74.2±23.3	0.155
Edinburgh Postnatal Depression Scale (EPDS)	12.5±5.2	17.7±7.1	0.140
Inventory of Statements About Self- Injury	16.8±17.6	26±14.7	0.397
Affect Regulation	2±1.22	3±2.54	0.452
Interpersonal Boundaries	1.40±1.67	2±1.58	0.576
Self-Punishment	0.60±0.89	1.80±1.48	0.160
Self-Care	1.40±2.19	1.80±1.30	0.735
Anti- Dissosication	1.20±2.16	2.20±1.64	0.435
Anti-Suicide	0.80±1.30	1.20±1.64	0.681
Sensation-Seeking	1.40±1.67	1.80±1.48	0.700
Peer-Bonding	2.20±2.28	0.80±1.09	0.251
Interpersonal Influence	2±2.54	1.60±1.81	0.782
Toughness	1±1.22	3.80±1.48	0.012
Marking Distress	1.40±2.19	3.20±1.92	0.205
Revenge	1.40±1.51	2.80±2.77	0.351
Interpersonal Functions	10.80±11.34	14.60±7.63	0.552
Intrapersonal Functions	6±6.51	11.40±7.89	0.272
Body Cathexis Scale	135.37±29.40	129.83±38.37	0.510
The Symptom Checklist	10.84±5.45	10.63±6.79	0.888
Somatization	1.34±0.60	1.31±0.79	0.848
Obsessive Compulsive Disorder	1.54±0.72	1.36±0.71	0.299
Interpersonal Sensitivity	1.24±0.88	1.03±0.79	0.292
Depression	1.35±0.75	1.16±0.76	0.276
Anxiety	1.08±0.70	1.07±0.71	0.980
Psychoticism	0.63±0.64	0.67±0.73	0.826

Table-3: The relationship between the total score and sub-dimension scores of the prenatal attachment scale administered in the Patient and Control groups

		Control		Tattooed (n=38)	
			Prenatal Attachment		
		r	p- values	r	p-values
BARRATT		-0.251	0.159	-0.480	0.002
	Non- planning Impulsivity	-0.157	0.377	-0.190	0.252
	Motor Impulsivity	-0.285	0.108	-0.352	0.030
	Attentional Impulsivity	-0.275	0.116	-0.478	0.002
Inventory of Statements About Self- injury		0.700	0.188	-0.200	0.745
	Affect Regulation	0.949	0.014	-0.100	0.873
	Interpersonal Boundaries	0.667	0.219	0	1
	Self-Punishment	-0.224	0.718	-0.410	0.493
	Self-Care	0.447	0.450	0.718	0.172
	Anti- Dissosication	0.224	0.718	0.051	0.935
	Anti-Suicide	0.447	0.450	-0.791	0.111
	Sensation-Seeking	0.667	0.219	-0.103	0.870
	Interpersonal Functions	0.600	0.285	-0.100	0.873
	Intrapersonal Functions	0.700	0.188	-0.200	0.747
Body Cathexis Scale		0.115	0.529	0.163	0.343
The Symptom Checklist		-0.144	0.440	-0.440	0.006
	Somatization	-0.066	0.710	-0.446	0.006
	Obsessive Compulsive Disorder	-0.076	0.668	-0.504	0.001
	Interpersonal Sensitivity	-0.124	0.486	-0.252	0.133
	Depression	-0.274	0.112	-0.331	0.045
	Anxiety	-0.114	0.515	-0.323	0.051
	Hostility	-0.138	0.429	-0.321	0.053
	Phobic anxiety	-0.221	0.202	-0.266	0.112
	Paranoid Ideation	-0.166	0.348	-0.191	0.258
	Psychoticism	-0.202	0.244	-0.252	0.132

SS-017 [Obstetri Genel]

Evaluation of the effects of refugee pregnant women, pregnancy outcomes and antenatal follow-up frequencies on pregnancy outcomes, Tertiary Center Experiences

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OBJECTIVE: Living as a refugee may have problems in areas such as accommodation, food and access to health services. Antenatal follow-up of refugee pregnant women does not comply with the guidelines recommended for antenatal care, and this is reflected in adverse pregnancy outcomes. Observational studies have shown that prenatal care is important for maternal and infant health and there is a relationship between the number of prenatal care and early prenatal care and pregnancy outcomes. However, studies on the optimal number of antenatal visits and what the content of the visit should be are contradictory. The World Health Organization (WHO) recommended at least 8 visits, one in the first trimester, two in the second trimester, and five in the third trimester. In our study, we aimed to compare the pregnancy and newborn outcomes of refugee pregnant women who were delivered in our tertiary center and to examine the effect of antenatal follow-up frequency on pregnancy and newborn outcomes.

METHOD: The data of refugee and Turkish primiparous pregnant women who applied to Etlik Zübeyde Hanım Training and Research Hospital between July 2021 and March 2022 and had vaginal deliveries were scanned retrospectively. 99 Turkish pregnant women (Group 1), whose data were fully accessible, were grouped as 99 Refugee pregnant women (Group 2), consisting of Syrian, Iraqi and Afghan nationals. Demographic data (Gravida, BMI, Age, Smoking, Comorbidity) and clinical data (number of antenatal follow-up, delivery room entry data, birth and postpartum period data, newborn data) were recorded by scanning patient files and hospital information system. The data were analyzed by descriptive statistical methods. The correlation between the number of antenatal follow-ups and pregnancy outcomes was examined.

RESULTS: In our Tertiary Center, 2698 vaginal deliveries occurred between July 2021 and March 2022, of which 869 were primiparous. A significant difference was observed between the groups in terms of gravida and smoking among the demographic data. (Table 1) Although there was a significant difference between the groups in the number of antenatal follow-ups, it was observed that the antenatal follow-up numbers of Turkish pregnant women were higher. (6.49 ± 4.67 & 4.35 ± 4.79) There was no significant difference between the groups in terms of clinical data such as delivery room admission, intrapartum, postpartum follow-up and obstetric complications. (Table 2) No correlation was observed between the number of antenatal follow-ups and newborn data (APGAR score and newborn birth weight). (Table 3) No maternal infant mortality was observed in either group.

CONCLUSION: In our study, in which we included primiparous pregnant women who had more frequent admissions in antenatal follow-up, we think that the number of antenatal follow-ups under WHO data is due to the effect of the pandemic process. Neonatal and obstetric

complications were not observed even at the frequency of antenatal follow-up, which is under WHO data. We think that the numbers such as 20 follow-ups are high and it is important to inform pregnant women about this issue. We think that there is no difference between the pregnancy outcomes of refugee and Turkish pregnant women due to the high level of coverage of our country's health system, pregnant follow-up system and health care services of refugee pregnant women. We think that our study should be supported by more multicenter and more patient studies.

Keywords: Refugee pregnant, antenatal follow-up, Pregnancy, Newborn outcomes

Table 1. Demographic data of pregnant women included in the study

	Total Pregnant (n = 198) (%100)	Turkish Pregnant (n = 99) (%50)	Refugee Pregnant (n = 99) (%50)	p
Age (years)	21,92 ± 4,01	21,77 ± 3,52	22,08 ± 4,46	0,58*
Gravida (min – max)	1 - 3	1 - 3	1 - 2	0,007*
BMI (kg/m2)	27,43 ± 4,25	26,93 ± 3,94	27,93 ± 4,51	0,09*
Smoking (%)				
Yes	5 (%2,5)	5 (%94,9)	-	
No	193 (%97,5)	94 (%5,1)	99 (%100)	0,02**
Additional Disease (%)				
None	181 (%91,4)	89 (%89,9)	92 (%93)	
Diabetes Mellitus	2 (%1)	1 (%1)	1 (%1)	
Hypertension	6 (%3)	3 (%3)	3 (%3)	
Thyroid Disorder	9 (%4,6)	6 (%6,1)	3 (%3)	0,78**

*Student-T test **Ki-Kare Test(x2) ***Mann Whitney-U Test

Table 2. Clinical data of pregnant women included in the study

	Total Pregnant (n = 198) (%100)	Turkish Pregnant (n = 99) (%50)	Refugee Pregnant (n = 99) (%50)	p
antenatal follow-up (mean, std dv) (min - max)	5,42 ± 4,84 (0-20)	6,49 ± 4,67 (0-18)	4,35 ± 4,79 (0-20)	0,002*
Gestational Week (mean, std dv)	38,78 ± 1,45	38,7 ± 1,35	38,86 ± 1,55	0,43*
Delivery Room Reason (%)				
Contraction	117(%59,1)	58 (%58,6)	59 (%59,6)	
Membran Rupture	52 (%26,3)	29 (%29,3)	23 (%23,2)	0,45**
Surmatuity	29 (%14,6)	12 (%12,1)	17 (%17,2)	
Birth Type (%)				
Vajinal	142 (%71,7)	69 (%69,7)	73 (%73,7)	
Cesarean section	56 (%28,3)	30 (%30,3)	26 (%26,3)	0,52**
Prepartum Hb (g/dl) (mean, std dv)	11,82 ± 1,32	11,78 ± 1,37	11,86 ± 1,26	0,66*
Postpartum Hb (g/dl) (mean, std dv)	10,21 ± 1,28	10,25 ± 1,32	10,17 ± 1,25	0,64*
Delta Hb (g/dl) (mean, std dv)	1,61 ± 0,79	1,52 ± 0,71	1,69 ± 0,86	0,14*
Newborn weight (g) (mean, std dv)	3093,99 ± 384,62	3072,37 ± 373,51	3115,61 ± 396,15	0,43*
Newborn gender (%)				
Female	101 (%51)	53(%53,5)	48(%48,5)	
Male	97 (%49)	46 (%46,5)	51 (%51,5)	0,47**
Fetal anomaly (%)				
No	196 (%99)	98 (%99)	98 (%99)	
Yes	2 (%1)	1 (%1)	1 (%1)	1**
APGAR 0 (mean, std dv)	8,95 ± 0,28	8,94 ± 0,31	8,96 ± 0,24	0,69***
APGAR 5 (mean, std dv)	9,96 ± 0,24	9,95 ± 0,26	9,97 ± 0,22	0,41***
Obstetric Complication(%)				
None	176(%88,9)	88 (%88,9)	88 (%88,9)	
Erythrocyte TX	15 (%7,6)	8 (%8,1)	7 (%7,1)	
Episiotomy desuria	6 (%3)	3 (%3)	3 (%3)	
Anal sphincter injury	1 (%0,5)	-	1 (%1)	0,78**

*Student-T test **Ki-Kare Test(x2) ***Mann Whitney-U Test

Table 3. The relationship between the number of antenatal follow-ups and newborn values of the pregnant women included in the study

	p	Not
Newborn weight	0,11	Not correlate
APGAR 0	0,39	Not correlate
APGAR 5	0,29	Not correlate

SS-018 [Obstetri Genel]

Comparison of Perinatal Outcomes Between Syrian Refugees and Turkish Women in the Middle Anatolia Region of Turkey

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AIM: As a result of the internal turmoil that started in Syria in March 2011, thousands of people had to migrate to many different countries, primarily Turkey, which has a long land border, to protect their safety, and then to provide a better life for them and their children. The most important problems that refugees face in the countries they live in are shelter, nutrition and food supplies, benefiting from health services, gaining work to survive financially, and communication/language barriers. Not being able to benefit from adequate health services is a problem in our country and an important problem in other countries where refugees have lived. As a result, adverse perinatal outcomes such as preterm birth, low birth weight, low Apgar scores, stillbirth, and obstetric complications such as blood transfusion, thromboembolism, infection, and atony are observed more frequently in refugee women due to limited access to basic needs and negative nutrition, negative living conditions, and inadequate antenatal care. This study aimed to compare the results of perinatal outcomes between Syrian refugees and Turkish women.

METHODS: The birth results of 17,997 participants (Syrian refugees: 3579 and Turkish women: 14418) who delivered in the Labor Department of our hospital between January 2016 and December 2020 were retrospectively analyzed. The data obtained from electronic patient records and the Obstetric Department archives were compared between the groups.

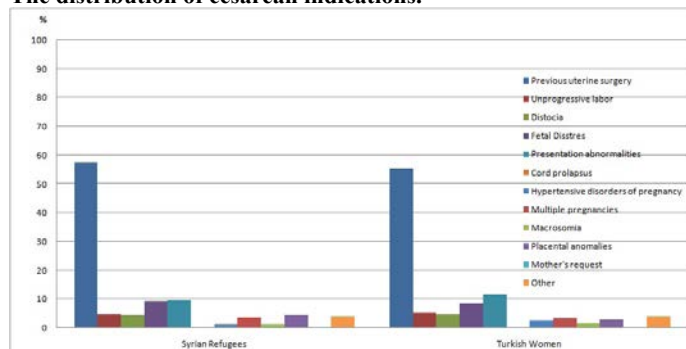
RESULTS: Maternal age was younger (24.73±6.08 vs. 27.4±5.91 years) and adolescent pregnancy rate was higher (19.4% vs. 5.6%) in Syrian refugees than in Turkish women (p<0.05). Bishop scores on admission (4.6±1.6 vs. 4.4±1.1), birth weight (3088.19±575.32 g vs. 3109.76±540.89 g), LBW (11.3% vs. 9.7%), and the rate of primary cesarean deliveries (10.1% vs. 15.8%) were also statistically different (p<0.05). There were statistically significant differences in terms of Hb (10.3±0.9 vs. 11.2±0.6 g/dL) and Htc (30.4±2.8 vs. 32.8±2.4) levels, and leukocyte (11.04±2.37 vs. 10.14±2.01) and platelet counts (301.97±42.79 vs. 271.10±48.58) (p<0.05). ALT and AST levels were comparable between the groups (p>0.05). Although the rates of GDM, meconium amniotic fluid, fetal abnormalities, PROM, preterm and post-term births were comparable (p>0.05), the rates of anemia (65.9%

vs. 29.2%), preeclampsia (1.4% vs. 2.7%), stillbirth (1.3% vs. 0.6%), PPROM (2.7% vs. 1.9%), and obstetric complications (blood transfusion: 6.1% vs. 4.3%, infection: 0.6% vs. 0.3%, peripartum hysterectomy: 0.4% vs. 0.1%) were different between the groups ($p < 0.05$).

CONCLUSION: Syrian refugees did not receive adequate antenatal care, and some adverse perinatal outcomes were observed more frequently due to communication and language barrier problems in our study. To reduce these negative perinatal outcomes, more planned-programmed antenatal care-follow-up services should be provided, communication and language problems should be minimized, refugees should benefit more from health services, and effective-appropriate contraception methods should be provided. As a result of these effective measures, refugees will be affected less psychologically, and with the reduction of costs and expenses, they will create less burden on the social security institution and the country's economy.

Keywords: antenatal care, cesarean; perinatal outcomes, Syrian refugees, Turkish women

The distribution of cesarean indications.



Clinical and laboratory outcomes of the participants.

	Syrian refugees (n=3579) (19.9%)	Turkish women (n=14418) (80.1%)	p
Hb (g/dL)	10.3+0.9	11.2+0.6	<0.001*
Htc (%)	30.4+2.8	32.8+2.4	<0.001*
Leukocyte count (103) (mcl)	11.04+2.37	10.14+2.01	<0.001*
Platelet count (103) (mcl)	301.97+42.79	271.10+48.58	<0.001*
Alanine aminotransferase (U/L)	31.62+17.88	31.24+17.72	0.245
Aspartate aminotransferase (U/L)	26.14+11.84	25.78+11.81	0.101
Anemia (Hb <11g/dL) (%)	65.9%	29.2%	<0.001*
Preeclampsia	1.1%	1.2%	0.596
Postterm birth rate (%)			
Gestational Diabetes Mellitus	1.7%	2.1%	0.088
Meconium in amniotic fluid	9.4%	8.6%	0.102
Stillbirth	1.3%	0.6%	<0.001*
Fetal abnormality	0.6%	0.8%	0.227
PROM	3.3%	2.8%	0.106
PPROM	2.7%	1.9%	0.002*

Sociodemographic and obstetric characteristics of the participants.

	Syrian refugees (n=3579) (19.9%)	Turkish women (n=14418) (80.1%)	p
Age (years)	24.73+6.08	27.4+5.91	<0.001*
Gravidity	4 (3-6)	2 (1-3)	<0.001*
Parity	3 (2-4)	1 (0-2)	<0.001*
Miscarriage	1 (1-2)	1 (1-1)	<0.001*
Multiple pregnancy	1.9%	1.6%	0.186
Gestational age at delivery (weeks)	38.4+12.4	38.3+9.7	0.883
Bishop score on admission	4.6+1.6	4.4+1.1	<0.001*
Induction of labor (%)	22.1%	36.3%	<0.001*
Birth weight (g)	3088.19+575.32	3109.76+540.89	0.044*
Low birth weight (<2500 g)	11.3%	9.7%	0.004*
Nicu admission rate (%)	14.1%	12.4%	0.010*
Hospital stay (days)	1.59+1.05	1.69+1.41	<0.001*
Vaginal birth (n, %)	2752 (76.9%)	10725 (74.4%)	<0.001*
Cesarean (n, %)	827 (23.1%)	3693 (25.6%)	<0.001*
Primary cesarean (n, %)	361 (10.1%)	1989 (15.8%)	<0.001*
Recurrent cesarean (n, %)	466 (13.0%)	1704 (11.8%)	<0.001*

SS-019 [Jinekoloji Genel]

Ooops...very low incidence of HPV infection in patients with CIN2! Why?

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BACKGROUND: The incidence of cervical carcinoma in Serbia is 20,3/100000, what means twice then west Europe. HPV test was not cover by insurance till now. There was not any study with exactly incidence of HPV infection among our population. Nowadays, we have possibility to do test on HPV infection in cervical specimen, knowing that HPV virus, especially high-risk types is main cause of developing precancerous lesions. AIM of this study was to evaluate the prevalence of HPV infection and to identify specific types of human papilloma virus in cervical intraepithelial lesions CIN 2+ before conization and in healthy women, without CIN2+

MATERIAL-METHOD: the study was conducted at the University Clinic for Obstetrics and Gynecology "Narodni front", Belgrade, Serbia. The study was performed on a cohort of 53 patients with CIN 2+ and 84 patients without CIN2+. Cervical cells were collected in the lithotomy gynecological position of the patient, using endocervical Cytobrush and cotton-tipped swab, and both were placed in sterile test tube with phosphate buffered saline. Samples were stored at temperature of 2 - 8 °C and Human Papilloma Virus (HPV) genotyping was analyzed within 7 days by multiple Polymerase Chain Reaction (PCR) methods.

RESULTS The mean age of enrolled women was 37 (minimum of 20 and maximum 67 years. Among the patients with CIN2+, the presence of HPV by using PCR was detected in 24,58 % (13patients) and among control group was 22,37%. The prevalence of HPV was highest (66,1%) in women aged 30-40 years old and it decreased with age and was lowest (6,5%) among patients older than 50 years. The prevalence of oncogenic types of the virus was highest then presence

low risk type in both groups. Results of HPV typing showed that HPV 16,58 and 31 were the most common types detected among the patients with CIN2+and some of them have multiple infection. HR HPV type 16 was the most common type in control group and 31. LR HPV type 6 is most common type in both groups. Surprisingly, in our population with CIN 2+ and control group we did not find any patients with type 18 and 11. CONCLUSIONS Our study showed very low incidence of HPV infection in CIN2+ group, almost the same as in control healthy patients. We did not find any patients with type 18 and 11. Probably, many other factors are including in developing precancerous lesions, especially in our country because we were bombarding with depleted uranium and maybe it can have influence.

Keywords: HPV infection, HSIL, Pap smear

SS-020 [Onkoloji]

Evaluation of correlation between final pathology of excision procedures and cervical cancer screening in our clinic

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AIM: In this study, it is aimed to evaluate the pathology results of smear, colposcopy and LEEP / conization procedures and to examine the degree of agreement between pathology results in cervical cancer screening.

MATERIALS-METHODS: In our clinic, 211 patients treated with LEEP / conization method between 2008-2017 were included in this study. The compliance scores between LEEP / conization, colposcopic biopsy and smear pathology results of these patients were retrospectively analyzed. IBM SPSS Statistics 22 (SPSS IBM, Turkey) program was used for statistical analysis.

RESULTS: The mean age of the cases was 38.5 ± 8.6 . The rate of HSIL (75%) of the colposcopy result of patients with normal cytology were statistically significantly lower than those ASCUS (80.6%) and LSIL (78.8%). The rate of HSIL (80.6%) in biopsy results of patients with ASCUS in smear was statistically significantly lower than that of the patients with HSIL in smear (87.5%). There is a statistically significant difference in the distribution ratios of conization / LEEP results in smear results. The rate of HSIL in conization / LEEP for HSIL (74.2%) in smear was statistically significantly higher than normal cytology (22.2%) and ASCH (48.7%) in smear.

CONCLUSION: Three methods namely smear, colposcopy and LEEP / conization should be used complementary to each other in identifying patients suitable for local excisional therapy. Clinical correlation of these three methods is important. Pap test alone is not enough to detect preinvasive lesion and patients should be directed to colposcopy and excision treatment when necessary.

Keywords: conization, colposcopy, LEEP, smear

SS-021 [Onkoloji]

Investigation of the importance of p16INK4a/KI-67 expression in high-risk HPV-positive cases

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OBJECTIVE: HPV is involved in the etiopathogenesis of cervical cancer and its precursor lesions. There are approximately 100 subtypes of HPV. HPV are 16 - 18 oncogenic subtypes and is responsible for 2 / 3 of cervical cancer.

Pap smear cervical cancer screening test. Pap smear and fluid - based cytology scans are data that reduce the cervical cancer rate, although a subjective test of cytology may have different results among clinicians.

HPV DNA is positive in % 99 of all cervical cancers. However, it can not distinguish between transient and chronic infections. Objective innovations are needed to detect and monitor lesions caused by HPV infections.

The aim of this study was to show that p16/ki67 staining of HPV 16 - 18 positive paraffin blocks were higher than non 16 - 18 high risk positive HPV blocks. Thus, p16/ki67 oncogenic HPV induced cervical lesions can be used for screening and monitoring of the objective is to show that this can be an objective test.

MATERIALS-METHODS: The p16 / Ki67 staining ratio was evaluated in 100 cytology examinations performed on pap smear, which consisted of 50 oncogenic HPV (type 16 - 18) positive and 50 (non - type 16 - 18) high risk HPV positive cytologies.

RESULTS: In cervical cytology, it was named as the group with high risk HPV (16 - 18) positivity (group A) and the group with high risk HPV positivity (expect type 16 - 18) (group B). In all patient group, BMI value was determined as 16,98. When the age values of all patients were examined, it was seen that min 21 max 76. While 27 patients (% 28.1) were smoking in all patients, no difference was found between A and B group (p = 0,368). Alcohol use rate (% 22,9) was observed in all patient groups. There was no difference (p = 0,810). It was observed that 24 of the patients were primary school graduated, 40 of them were high school and 17 university graduated no difference was observed (p = 0,152)

CONCLUSION: While the P16 / Ki67 staining ratio was % 80 for LSIL, %100 HSIL and % 100 carcinoma in HPV (type 16 -18) cases, p16 / ki 67 staining ratio was found to be % 40 for other high risk group HPV cervical cytologies. A significant difference was observed between HPV type 16 - 18) and other staining ratio.

Keywords: cervical cancer, HPV, Pap smear

SS-022 [Onkoloji]

Determination of miR-370, miR-125b and miR-23a expression levels and their association with the clinicopathological parameters in patients with high-grade cervical intraepithelial neoplasia (HSIL) and cervical squamous cell cancers (SCC)

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AIM: The aim of the present study was to determine the role of miR-370, miR-125b and miR-23a in patients with high-grade cervical intraepithelial neoplasia (HSIL) and cervical squamous cell cancers (SCC), reveal the clinical significance of these miRNA and determine the association of miRNAs with the clinicopathological parameters of patients.

METHODS: Thirty-five patients with cervical SCC, 35 patients with HSIL, and 30 patients with normal cervical tissue, who were operated for cervical pathology and whose pathology report was examined by at least two pathologists, were included in the study. For the study, miRNA isolations were performed from the sections obtained from the paraffin blocks of the patients, and the expression levels between the groups were determined by the Real Time PCR method. Expression levels and prognostic variables of the disease (stage, lymph node positivity, metastasis status) were compared.

FINDINGS: Our results indicated that miR-370, miR-125b and miR-23a were differentially expressed in HSIL and cervical SCC tissues compared to normal tissues (Figure 1). The expression level of miR-370 was significantly increased in the cervical SCC group compared to the control group ($p=0.0186$), but the change in the HSIL group was not statistically significant ($p=0.1672$). In addition, the expression level of miR-23a was found to be statistically increased in the HSIL ($p=0.0015$) and cervical SCC ($p<0.001$) groups compared to the control group. Also, miR-125b expression level was found to be significantly decreased in HSIL ($p<0.001$) and cervical SCC ($p<0.001$) groups compared to the control group. When the expression levels of miR-370, miR-125b and miR-23a in the patient groups were compared with the prognostic variables (stage, metastasis status, lymph node positivity), no significant correlation was found. The median value of expression levels of miRNAs in tissue was calculated and overall survival analyzes were performed accordingly (Table 1). In this model, it was determined that miR-370 expression level had no effect on overall survival ($p=0.376$). Similarly, expression changes of miR-23a ($p=0.140$) and miR-125b ($p=0.607$) were found to have no effect on overall survival (Figure 2). When the expression level of miR-370 was compared according to the stages, no significant difference was found between them ($p=0.3154$). In addition, it was found that miR-370 level was not statistically significant according to lymph node and metastasis status (Table 2). When the expression level of miR-23a was compared with the clinical features of the cervical SCC group, it was found that there was a difference between the stage, lymph node and metastasis. However, these differences were not statistically significant ($p<0.05$). Similarly, it was determined that miR-125b expression level changed

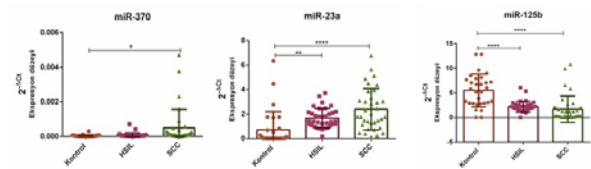
in stage, lymph node and metastasis status, and these changes were not statistically significant ($p<0.05$).

CONCLUSION: Collectively, our findings indicate that these three miRNAs, miR-370, miR-125b and miR-23a were differentially expressed in tissues of HSIL and cervical SCC patients. To better understand the clinical significance of these biomarkers more comprehensive further research is needed.

Keywords: HSIL, cervical cancer, miRNA, cervical SCC

Figure 1

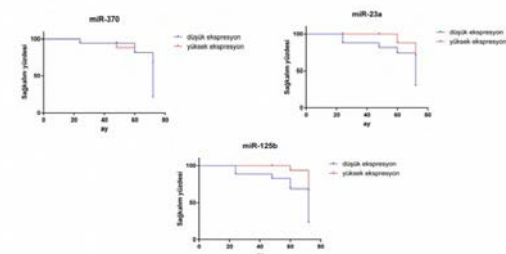
Figure 1. Demonstration of expression level of miR-370, miR-23a and miR-125 in control, HSIL and cervical SCC groups



Demonstration of expression level of miR-370, miR-23a and miR-125 in control, HSIL and cervical SCC groups

Figure 2

Figure 2: Effect of expression level of miR-370, miR-23a and miR-125b on overall survival



Effect of expression level of miR-370, miR-23a and miR-125b on overall survival

Table 1

miRNA	Expression levels	Mean	SD	%95CI (min-max)	p value
miR-370	Low	0.000057	0.000032	0.000040-0.000073	0.376
	High	0.000094	0.000134	0.000027-0.000161	
miR-23a	Low	1.019	0.5479	0.7375-1.301	0.140
	High	3.601	1.337	2.959-4.242	
miR-125b	Low	0.1708	0.1355	0.1034-0.2382	0.607
	High	3.181	3.085	1.647-4.716	

Analysis of overall survival by expression levels of miR-370, miR-23a and miR-125b

Table 2

miRNA	Clinical feature	Mean	SD	%95 CI	p value
	Stage IA2 IB1 IVB	0.00019 0.00065 0.00012	0.00026 0.0012 0.00010	-0.00047-0.000085 0.00015-0.0011 0.000018-0.00022	0.3154
miR-370	Lymph N0 N1/2	0.00057 0.000098	0.0011 0.00011	0.00016-0.00099 -0.000018-0.00021	0.1046
	Metastasis M0 M1/2	0.00060 0.00011	0.0011 0.00010	0.00016-0.0010 0.000028-0.0002	0.182
	Stage IA2 IB1 IVB	1.321 2.445 2.325	1.065 1.526 2.278	-1.325-3.996 1.815-3.075 0.218-4.431	0.3896
miR-23a	Lymph node N0 N1/2	2.384 2.370	1.484 2.566	1.83-2.938 -0.322-5.063	0.5518
	M0 M1/2	2.325 2.581	1.510 2.230	1.739-2.910 0.7166-1.446	0.9311
	IA2 IB1 IVB	1.143 1.770 1.794	0.7012 2.586 3.620	-0.5989-2.885 0.7022-2.837 -1.553-5.142	0.665
miR-125b	Lymph Node N0 N1/2	1.565 2.232	2.410 3.823	0.665-2.465 -1.779-6.244	0.8519
	Metastasis M0 M1/2	1.703 1.584	2.453 3.404	0.751-2.654 -1.262-4.429	0.3657

Comparison of miRNA expression levels according to clinical characteristics of cervical SCC patients

SS-023 [Jinekoloji Genel]

Appropriate management in patients with low-level cervical cytology and non-16/18 high-risk human papillomavirus

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OBJECTIVE: Patients with high-risk human papillomavirus (HPV) types other than type 16 or 18 (OHR-HPV) and low-level cervical cytology (i.e., atypical squamous cells of undetermined significance, low-grade intraepithelial lesion, or unsatisfactory smear) are directed to colposcopy, and the suspicious lesions are biopsied. We aimed to determine the appropriate management of patients with OHR-HPV and low-level cytology.

METHOD: A retrospective study of patients who underwent colposcopic cervical biopsy between January 1, 2016, and December 31, 2019. Based on their diagnosis, patients were classified into either the HPV 16/18 group or the OHR-HPV group and were further subcategorized based on cervical smear cytology and biopsy histology.

RESULTS: We identified 717 patients with HPV positive who underwent colposcopic cervical biopsy. Among patients with low-level cytology, a

significantly higher percentage of patients with HPV 16 or 18 had high-level histological lesions on biopsy compared to patients with OHR-HPV ($P=0.001$). There was no significant association between low-level cytology and biopsy result in the OHR-HPV group ($P=0.074$). However, in the HPV 16/18 with low-level cytology group, there was a higher percentage of cases with high-level histology on biopsy ($P=0.013$).

CONCLUSION: Our study showed that in low-level cytology patients OHR-HPV-positive group were less associated with the high-level cervical biopsy results than HPV 16/18-positive group. We think that prospective randomized trials are needed to assess the need for colposcopy in low-level cytology with OHR-HPV-positive patients.

Keywords: cervical intraepithelial neoplasia, colposcopy, human papillomavirus, vaginal smears

Cervical biopsy results of the negative cytology and the low-level cytology subgroups of the main HPV groups.

	HPV 16/18			OHR-HPV		
Cervical biopsy result	Negative cytology n (%)	Low-level cytology n (%)	P-value*	Negative cytology n (%)	Low-level cytology n (%)	P-value*
Benign and CIN 1	192 (78.7)	52 (66.9)	0.013	130 (56.0)	102 (42.6)	0.074
CIN 2, 3 and ICC	85 (21.3)	42 (33.1)		23 (44.0)	31 (57.4)	

*Chi-squared test. HPV: Human papillomavirus. CIN: Cervical intraepithelial neoplasia. ICC: Invasive cervical cancer. OHR: Other high-risk.

SS-024 [Onkoloji]

HPV testing before the age of 30; Review of cytology and colposcopy results

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AIM: To evaluate the outcomes of HPV testing before the age of 30

METHODS: Hospital database was searched for HPV test result during 2021. Patients that admitted to the hospital for routine control included to the study. Cervical cytology was performed using liquid based cytology (Thin prep). HPV DNA testing was performed using FDA approved HPV test (cobas-Roche). Specimens were collected using a cytology brush (directa). HPV test results including HPV type (HPV 16, HPV 18, HPV Other high risk) and presence of ASC-US, ASC-H, LGSIL, HGSIL, AGUS were recorded. The association between HPV test results and kolposcopy test results were evaluated.

RESULTS: A total of 356 patients that were tested for HPV and cervical cytology were encountered during the study period. Mean age was 25.76 ± 2.77 . All patients were tested for smear and HPV. Cervical cytology was normal 311 (87.3%) among the patients. Cytologic abnormality was detected in 45 (13.7%) of the patients. ASC-US,

ASC-H and LGSIL was detected in 27, 5 and 13 patients respectively. HPV test positivity was detected in 80 (22.4%) patients. HPV 16, HPV 18 and HPV other High risk was detected in 34 (9.6%), 3 (0.8%) and 43 (12.1%) patients. Both HPV positivity and abnormal cytology was detected in 20 patients. The rate of HPV positivity without any cytologic abnormality was 16.8%. Colposcopy and/or colposcopic directed biopsy was performed in 22 of the patients. In all of the patients who underwent colposcopic biopsy, either acetowhite epithelium or mosaicism was detected in colposcopy. HPV positivity was found in 17 (77.27%) of these patients. Patients with hpv positivity but who did not undergo colposcopic biopsy are those who either did not come to the control or did not have any pathological findings in the colposcopy performed under the control. Of those who underwent biopsy, 2 (9.1%) were normal/inflammation, 20 (90.9%) cervical premalignant lesion (14 (63.63%) CIN1 and 6 (27.27%) CIN2-3). HPV positivity of 15 patients with premalignant lesion as a result of colposcopic biopsy (12 (80%) HPV-16 positive, 1 (6.67%) HPV-18 positive, 2 (13.33%) HPV other positive), in 5 patients (25% of premalignant lesion)) had a cervical premalignant lesion despite being HPV negative.

CONCLUSION: Routine HPV screening before the age of 30 is not recommended in Turkey. In addition to high HPV positivity and cytology negative and HPV positive results suggested that HPV screening may be enhanced to below the age of 30.

Keywords: HPV screening, cervical cytology, High risk HPV

Table 1.

	Negatif	16	18	Diğer
Sitoloji				
Normal	251 (80.7)	25 (8)	3 (1)	32 (10.3)
ASC-US	19 (70.4)	3 (11.1)	0(0)	5 (18.5)
ASC-H	2 (40)	2 (40)	0 (0)	1 (20)
AGUS	0	0	0	0
LGSIL	4 (30.8)	4 (30.8)	0	5 (38.5)
HGSIL	0	0	0	0
SCC	0	0	0	0
Kolposkopik biyopsi	Negatif	Tip 16	Tip 18	Diğer
Normal İnflamasyon	0 (0.0%)	2 (5.9%)	0 (0.0%)	0 (0.0%)
CIN-1	4 (1.4%)	8 (23.5%)	1 (33.3%)	1 (2.3%)
CIN-2	0 (0.0%)	3 (8.8%)	0 (0.0%)	1 (2.3%)
CIN-3	1 (0.4%)	1 (2.9%)	0 (0.0%)	0 (0.0%)
Mikroinvaziv SCC	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Yapılmamış	271 (98.2%)	20 (58.8)	2 (66.7%)	41 (95.3)

The association of cervical cytology and HPV test results

SS-026 [Onkoloji]

Role of endocervical curettage in colposcopy

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Introduction: Endocervical curettage (ECC) is generally recommended in the presence of inadequate colposcopy, lesion extending to the endocervical canal, and cytology-colposcopy incompatibility. ECC procedure, which is an invasive procedure and has many side effects, is the most difficult to tolerate part of colposcopy. Some studies

have found that the diagnosis rate is increased by only 1% when traditional ECC is used in all women. However, the indications and values of ECC are still unclear, and there is some controversy. In this study, we aimed to investigate the role of endocervical curettage during colposcopy in detecting cervical intraepithelial neoplasia.

Method: The data of 952 patients who were followed up at Ankara City Hospital Gynecological Oncology Surgery Clinic between September 2019 and February 2022 were analyzed. The results of endocervical curettage after colposcopy in these patients were evaluated retrospectively.

Results: In 952 patients who underwent ECC after colposcopy, the rate of CIN2 detection was 1.99% (19/952), the rate of CIN3 detection was 2.62% (25/952), and the rate of CIN2 and CIN3 detection was 4.62% (44/952). The rate of CIN2+ patients not detected in colposcopic biopsy but detected only in ECC was 0.73% (7/952).

CIN2+ lesions were detected in ECC in 3.23% (9/278) of the patients with normal smear results, 4.15% (15/361) of those with ASCUS, and 4.51% (7/155) of those with LSIL.

CIN2+ lesions were detected in 21.87% (7/32) of those with HSIL, 16.6% (5/30) of those with ASC-H, and 20% (1/5) of those with AGC.

Conclusion: Gage et al found that the additional detection rate of ECC was 5.4% in all cases with CIN2+. In a study by Pretorius et al., 4.5% CIN2+ lesion was detected in ECC performed in 18,537 colposcopy. In our study, this rate was 4.61% (44/952), and it was found to be similar to previous studies. In the study of Solomon et al., it was found that ECC contributed 0.73% to the detection of CIN 2+, independent of cervical biopsy (missed) in patients. Overall in our study, too 4.61% of ECCs were positive for CIN 2+, compared to 23.83% of the corresponding tissue biopsies; only 0.73% of all ECCs (7 out of 952) contributed to the detection of (missed) CIN 2+ independent of cervical biopsy. In the study of Pinar et al., it was determined that routine ECC performed in colposcopy with the diagnosis of ASCUS/LSIL has minimal diagnostic value. Similarly, in our study, CIN2+ lesions were detected in 4.15% of those with ASCUS, 4.51% of those with LSIL, 21.87% of those with HIL, 16.6% of those with ASC-H, and 20% of those with AGC. With these results, the idea that performing ECC as a routine procedure in colposcopy does not provide an advantage in terms of profit and loss for every patient and that this procedure should be preferred in the selected patient group outweighs. The necessity of this procedure, which is the most difficult to tolerate colposcopy for the patient, will become clear with the increase of prospective multicenter clinical studies.

Keywords: Endocervical curettage, colposcopy, cervical intraepithelial neoplasia

biopsi ve ecc de CIN saptanma oranları

	CIN2	CIN3	CIN2+
Serviks Biopsi	%13.02	%10.81	%23.83
ECC	%2.62	%1.99	%4.61

Koploskopide ecc patoloji sonuçları

KOLPOSKOPİDE_ECC_patolojisi

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid CIN1	17	7,5	7,5	7,5
CIN2	19	8,4	8,4	15,9
CIN3	25	11,0	11,0	26,9
YÜZEY EPİTEL HÜCRE	92	40,5	40,5	67,4
MUKÖİD	52	22,9	22,9	90,3
POLİP	1	,4	,4	90,7
SERVİSİT	21	9,3	9,3	100,0
Total	227	100,0	100,0	

SS-027 [Onkoloji]

Is colposcopy really necessary for initial management of HPV positive patients with ASC-US?: Experience of a tertiary center

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AIM: The current American Society of Colposcopy and Cervical Pathology (ASCCP) guidelines recommend colposcopy if the patient is human papillomavirus (HPV) positive and atypical squamous cells of undetermined significance (ASC-US) or low-grade squamous intraepithelial lesion (LSIL) is detected in initial screening since immediate cervical intraepithelial neoplasia (CIN) 3+ risk is 4.5%. The aim of this study is to find out if colposcopy is really necessary in HPV positive ASC-US or LSIL patients.

MATERIAL-METHODS: Patients who underwent colposcopy directed biopsy in Ordu University Training and Teaching Hospital between January 2018 and December 2021 were retrospectively reviewed. Patients with any high-risk HPV positivity who had cervical smear cytology and colposcopy directed biopsy results were included to this study. Results of HPV subtypes, cervical smear and histologic biopsy were recorded. CIN 3+ lesion rates were calculated for patients with normal, ASC-US and LSIL cervical smear cytology result according to HPV type (patients with HPV 16 and/or HPV 18 either alone or in combination with other high-risk subtypes vs other high-risk HPV subtypes).

RESULTS: A total of 734 patients were included to this study. The mean age of the patients was 41.9 ± 7.36 years. Hundred and sixty-five (22.5%) patients had HPV 16 alone, 35 (4.8%) had HPV 18 alone, 354 (48.2%) had other high-risk HPV subtypes alone and 180 (24.5%) had more than one high-risk HPV subtypes. Two hundred and ninety-eight (40.6%) had HPV 16 or HPV 18 either alone or in combination with other subtypes. Cervical cytology result was normal in 406 (55.3%) patients, ASC-US in 198 (27%) patients and LSIL in 63 (8.6%) patients (Table 1). Among the patients with normal cytology results, CIN 3+ lesion rates were 6.1% and 0% in patients with HPV 16 and/or HPV 18 either alone or in combination with other high-risk subtypes and patients with other high-risk HPV subtypes, respectively ($p < 0.001$). In subgroup of patients with an ASC-US cytology result, CIN 3+ lesion rate was 14.5% in HPV 16 and/or HPV 18 patients and 0.7% in other high-risk subtypes ($p < 0.001$). Among the patients with a LSIL cytology result, CIN 3+ lesions were detected in 33.3% and 7.1% of the patients with HPV 16 and/or HPV 18 and patients with other high-risk HPV subtypes, respectively ($p = 0.012$) (Table 2).

CONCLUSION: HPV 16 and 18 is more oncogenic than other subtypes and these patients should be evaluated with colposcopy even when the cytology is normal. On the other hand, immediate CIN 3+ risk is below the threshold of colposcopy ($< 4\%$) for the patients with other high-risk HPV types who has normal or ASC-US cytology result and colposcopy may be deferred for these certain patients.

Keywords: atypical squamous cells of the cervix, colposcopy, human papillomavirus

Table 1. Clinicopathologic characteristics of the patients

Characteristic	Number (%)
Age, years (mean)	41.89±7.36
HPV Test	
HPV 16	165 (22.5)
HPV 18	35 (4.8)
Other high-risk subtypes	354 (48.2)
Multiple	180 (24.5)
Cervical Cytology	
Normal	406 (55.3)
ASC-US	198 (27)
LSIL	63 (8.6)
HSIL	9 (1.2)
ASC-H	6 (0.8)
Unsatisfactory	52 (7.1)
Colposcopy Directed Biopsy	
Normal	452 (61.6)
CIN 1	199 (27.1)
CIN 2	36 (4.9)
CIN 3	42 (5.7)
SCC	5 (0.7)

Table 2. Frequency of CIN 3+ lesions according to HPV subtypes and cervical smear cytology results

Smear	HPV type	Colposcopy Directed Biopsy		p value
		<CIN 3	CIN 3+	
Normal	16/18	170 (93.9)	11 (6.1)	<0.001
	Others	225 (100)	0 (0)	
	16/18	53 (85.5)	9 (14.5)	
ASC-US	Others	135 (99.3)	1 (0.7)	<0.001
	16/18	14 (66.7)	7 (33.3)	
	Others	39 (92.9)	3 (7.1)	
LSIL	16/18	1 (16.7)	5 (83.3)	0.583
	Others	1 (33.3)	2 (66.7)	
	16/18	2 (50)	2 (100)	
ASC-H	Others	0 (0)	2 (100)	0.467
	16/18	20 (83.3)	4 (16.7)	
	Others	27 (96.4)	1 (3.6)	

SS-028 [Onkoloji]

Skinning Vulvectomy in VIN3

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Vulvar intraepithelial neoplasia is precancerous lesion of vulvar skin. Mostly presented with hyperpigmented itchy vulvar lesions. If not treated properly, it can result with invasive vulvar carcinoma. We aimed to present video demonstration of skinning vulvectomy and skin graft in a young patient with VIN3.

Keywords: Vulvar intraepithelial neoplasia, skinning vulvectomy, vulvar graft

SS-029 [Obstetri Genel]

Can biometric measurement be a prediction for gestational diabetes mellitus?

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PURPOSE: Gestational diabetes mellitus or (GDM) is a widely common condition defined as glucose intolerance and it specifically affects pregnant women [1]. It is a significant complication of pregnancy that carries a high risk of comorbidity or mortality to the pregnant woman and her baby. Thanks to GDM screening and treatment, many pregnancy complications can be largely prevented and maternal and fetal morbidity and mortality can be reduced [2-4]. However, unfortunately, the rate of pregnant women who do not have 75-g oral glucose tolerance test (OGTT) due to misinformation and thought is increasing. The aim of the present study was to predict the use of a noninvasive sonographic marker that can predict GDM, which is a common health problem and important due to maternal-fetal complications.

MATERIALS-METHODS: In this prospective study, pregnant women with singleton pregnancy who were referred for routine antenatal anatomical screening and had antenatal OGTT results between the 18th and 26th weeks of pregnancy between 2017 and 2020 were included. The patients diagnosed with GDM as a result of screening (n: 70) and patients with normal glucose tolerance (n: 410) were compared in terms of sonographic parameters. Evaluated sonographic parameters were fetal biparietal diameter (BPD), abdominal circumference (AC), head circumference (HC), femur length (FL) and the ratios of these parameters to each other and estimation of fetal weight (EFW) and amniotic fluid deepest vertical pocket (DVP).

RESULTS: Average statistics on the demographic variables are similar in both "Normal" and "GDM" groups. Besides almost all of the ultrasound parameters have significant differences between the "Normal" and "GDM" groups (P values <0.05). Only three ratios HC, FL/BPD (%) and FL/HC (%) have in-significant differences between the ultrasound parameters. (Table 1) We observed that AUC (ratio between sensitivity and specificity values) are in the acceptable range (AUC between 0.6 and 0.7) for AC (mm), AC (percentile), EFW (g), EFW (p) and AFI DVP (cm) parameters. (Table 2)

CONCLUSION: This preliminary study shows us that GDM risk can be predicted by looking at ultrasound parameter values (AC, EFW, and DVP). However, the area under the ROC curves is not very sufficient to determine the cutoff values. For this reason, this study should be improved by increasing the data set, especially the number of patients with GDM.

Keywords: Gestational diabetes mellitus, Glucose tolerance test, Pregnancy, Ultrasonography

References

1. Metzger BE, Coustan DR. Summary and recommendations of the Fourth International Workshop-Conference on Gestational Diabetes Mellitus. The Organizing Committee. Diabetes Care 1998;21 Suppl 2:B161-7.
2. Landon MB, Spong CY, Thom E, Carpenter MW, Ramin SM, Casey B, et al. A multicenter, randomized trial of treatment for mild gestational diabetes. N Engl J Med 2009;361: 1339-48.
3. Crowther CA, Hillier JE, Moss JR, McPhee AJ, Jeffries WS, Robinson JS: Australian Carbohydrate Intolerance Study in Pregnant Women (ACHOIS) Trial Group. Effect of treatment of gestational diabetes mellitus on pregnancy outcomes. N Engl J Med 2005;352:2477-86.
4. Alwan N, Tuffnell DJ, West J. Treatments for gestational diabetes. Cochrane Database Syst Rev 2009;3:CD003395.

Table 1:

Variable	p-value
Age	0.225
BMI	0.384
Gravide	0.319
Parite	0.114
Abortus	0.641
Gestational Age	0.277
BPD	0.020
HC	0.106
AC	0.001
AC (percentile)	0.001
FL	0.045
FL/AC (%)	0.000
FL/BPD (%)	0.726
FL/HC (%)	0.384
HC/AC (%)	0.000
EFW (gr)	0.000
EFW (p)	0.000
DVP (cm)	0.000

Significance of differences of the study variables for the two groups

Table 2:

Ultrasound parameters	AUC
BPD	0.562
HC	0.537
AC (mm)	0.634
AC (percentile)	0.628
FL	0.561
FL/AC (%)	0.394
FL/BPD (%)	0.499
FL/HC (%)	0.529
HC/AC (%)	0.323
EFW (gr)	0.609
EFW (p)	0.643
DVP (cm)	0.683

ROC analysis (AUC area under curve calculated based on sensitivity-specificity)

SS-030

Comparison of the effects of oral 50 and 75 gram glucose challenge tests on serum oxidative stress markers in diabetic and non-diabetic pregnant women

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INTRODUCTION: Gestational diabetes mellitus (GDM) refers to glucose intolerance, which starts with conception and improves after the delivery. The incidence of diabetes complicating pregnancy is estimated to be as high as 6-7% (90% GDM). SIRT1 increases insulin secretion by stimulating β cells in the pancreas and increases insulin sensitivity in peripheral tissues. It has been observed that SIRT1 has positive effects on insulin resistance and diabetes by activating various mechanisms such as inflammation and oxidative stress. Ischemia modified albumin (IMA) is recognized as a hallmark of oxidative stress and is associated with ischemia-reperfusion injury in any body organ. This study has aimed to evaluate the effects of glucose challenge test (GCT)-induced hyperglycemic peaks on the SIRT1 and IMA levels in pregnant women.

MATERIAL-METHODS: Women with single pregnancies, admitted to the gynecology and obstetrics clinics of Ordu University Training and Research Hospital of in the period from August 2019 to February 2020, were examined in the study. Pregnant women were excluded when it was found that they were previously diagnosed with diabetes or endocrine disorders, or when a congenital anomaly was identified in the prenatal screening program. In the 24th to 28th weeks of pregnancy 41 and 47 women underwent a 50-g GCT (Group 1) and 75-g GCT (Group 2), respectively. When the hour 1 glucose levels in Group 1 were ≥ 140 mg/dl, a 3-hour 100-g OGTT was carried out. A diagnosis of GDM was made when 2 or more test results were higher than the threshold levels in the four obtained samples of blood during the 100-g GCT. When one or more blood values of glucose in the hour 0, 1, or 2 of the 2-hour 75-g test was higher than the threshold levels, a diagnosis of GDM was made. The levels of SIRT and IMA were also tested in the obtained blood samples during GCT.

RESULTS: Ten patients (11.4%) were diagnosed with GDM in this cohort. The age, weight gain during the pregnancy, the length of the delivery period, and the Apgar scores of the infants were comparable among the groups (Table 1). No statistically significant differences were present between the groups in the levels of SIRT1 and IMA in hour 0 and 1 (Table 2). However, SIRT1 was significantly increased in the first hour in Group 1 and 2 ($p < 0.001$, $p: 0.022$, respectively), IMA was only increased in the Group 2 ($p < 0.001$). The comparison of the test results of these 2 markers between the GDM positive and negative pregnant women revealed no statistically significant difference (Table 3). Correlation analysis also showed that neither SIRT1 nor IMA significantly correlated with the recorded parameters.

CONCLUSION: Based on these results, it was concluded that 75-g GCT more aggravated the oxidative stress load in pregnant women by creating higher hyperglycemia peak. However, the effect of GDM on this situation could not be clearly established due to the insufficient number of patients. Further large-scale comprehensive studies investigating this subject are warranted in order to achieve certain conclusions about the oxidative stress load induced by GCT in pregnant women and their fetuses.

Keywords: Gestational diabetes mellitus, oral glucose challenge test, SIRT1, Ischemia modified albumin, oxidative stress

TABLE-1

	Group 1 (n:41)	Group 2 (n:47)	P-value
Age	25.06 \pm 3.75	25.48 \pm 4.76	0.625
BMI at the time of conception	24.6 \pm 5.58	23.86 \pm 4.04	0.456
Blood sugar level at hour 0	86.2 \pm 12.44	82.42 \pm 11.09	0.112
Blood sugar level at hour 1	121.98 \pm 27.34	126.42 \pm 29.27	0.435
Bodyweight at the time of conception	64.88 \pm 14.88	61.6 \pm 10.94	0.212
Bodyweight at the end of pregnancy	77.62 \pm 14.6	75.61 \pm 12.23	0.457
Weight gain during the pregnancy	13.04 \pm 5.85	13.77 \pm 6.76	0.568
The length of the delivery period (min) 4.10 cm	185.34 \pm 104.86	222.37 \pm 148.29	0.177
The length of the delivery period (min). full cervical effacement	15.14 \pm 14.53	18.1 \pm 17.09	0.396
Birthweight	3268.8 \pm 509.99	3161 \pm 589.18	0.330
Delivery week	38.54 \pm 1.74	38.34 \pm 1.9	0.585
Apgar 1	9 \pm 0	8.9 \pm 0.71	0.320
Apgar 5	9.98 \pm 0.14	9.88 \pm 0.72	0.336

Comparison of the pregnancy-related and childbirth data between the groups

TABLE-2

	Group 1	Group 1	P-value	Group 2	Group 2	P-value	P-value	P-value
	Hour 0	Hour 1	P1	Hour 0	Hour 1	P2	P3	P4
SIRT1	2.05 \pm 1.85	4.96 \pm 4.57	0.001	2.24 \pm 2.91	4.19 \pm 4.95	0.022	0.719	0.719
IMA	0.61 \pm 0.06	0.61 \pm 0.08	0.825	0.62 \pm 0.06	0.68 \pm 0.07	<0.001	0.177	0.177

P1-probability value between 50-g OGTT Hour 0 and Hour 1

P2-probability value between 75-g OGTT Hour 0 and Hour 1

P3-probability value between 50-g OGTT Hour 0 and 75-g OGTT Hour 0

P4-probability value between 50-g OGTT Hour 1 and 75-g OGTT Hour 1

P < 0.05 was considered statistically significant

Comparison of the SIRT1 and IMA markers obtained in hours 0 and 1 in pregnant women undergoing 50-g and 75-g GCT

TABLE-3

Values	GDM (-) (n=78)	GDM (-) (n=78)	P-value	GDM (+) (n=10)	GDM (+) (n=10)	P-value
	Hour 0	Hour 1	P1	Hour 0	Hour 1	P2
SIRT1	2.23 \pm 2.54	4.52 \pm 4.74	0.384	1.51 \pm 1.74	4.76 \pm 5.27	0.886
IMA	0.61 \pm 0.06	0.65 \pm 0.09	0.183	0.64 \pm 0.03	0.62 \pm 0.04	0.312
Datas were given as mean \pm SD						

Comparison of SIRT1 and IMA markers between the GDM positive and negative pregnant women

SS-031

Vascular Effects of Gestational Diabetes Can Be Recognized by Carotis Intima Media Thickness: A Prospective Case-Control Study

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OBJECTIVE: Gestational diabetes is a systemic disease with poor maternal and fetal outcomes. Patients diagnosed with GDM are more likely to encounter cardiovascular system diseases during pregnancy and postpartum. Carotid intima-media thickness (CIMT) can be used as an early marker of cardiovascular diseases such as coronary artery disease (CAD). Our aim is to detect the effects of hyperglycemia in patients diagnosed with GDM early using CIMT, maternal and fetal Doppler currents.

MATERIAL-METHODS: 132 pregnant women at 24-28 weeks of gestation were included in the study. Women with similar demographic characteristics with and without GDM were compared with the 100 g oral glucose test (OGT). Routine hemogram and biochemical techniques were taken from the participants during OGT. During the obstetric examination of the participants, fetal biometry, amniotic fluid index, uterine artery Doppler currents and bilateral CIMT measurements were made.

RESULTS: 67 of the participants were in the control group and 65 of them were in the GDM group (GDM).. The gravida, money and live birth rates of the participants in the GDM group were higher than the control group ($p=0.003$, 0.002 , 0.002 respectively). Amniotic fluid index was found to be higher in the GDM group ($p<0.001$). From the laboratory data, fasting glucose values and platelet counts were found to be higher in the GDM group ($p=0.031$ and $p<0.001$). There was no statistically significant difference between the groups in other laboratory data ($p>0.05$). When Doppler measurements were compared, UA PI values were similar between the groups ($p=0.509$). While the right UtA pulsatility index was higher in the GDM group ($p<0.001$), there was no statistically significant difference between the left UtA pulsatility indices ($p=0.485$). Right and left carotid artery intima thicknesses were higher in the GDM group ($p=0.001$, $p<0.001$, $p<0.001$ respectively). While platelet levels and uterine artery resistances were positively correlated in the GDM group ($r=0.336$, $p=0.006$; $r=0.397$, $p=0.044$ respectively), no similar correlation was found in the control group ($p>0.05$).

CONCLUSION: In our study, we showed that inflammation, resistance in uterine artery flow and CIMT increase in GDM patients. We showed that there is a correlation between CIMT and glucose levels and thrombocytosis and UtA resistance in GDM patients. Uterine artery Doppler data and CIMT measurements can be used as markers of systemic inflammation and cardiovascular disease in GDM patients.

Keywords: Gestational diabetes, Cardiovascular disease, Doppler, Carotis İntima Media

SS-032 [Obstetri Genel]

The impact of first-trimester vitamin D levels on gestational diabetes mellitus

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OBJECTIVE: Gestational diabetes mellitus (GDM) is a widespread condition among pregnant women, increases with maternal age, unhealthy lifestyle, and body mass index. Recent meta-analysis of observational studies estimated that low vitamin D status is associated with an increased risk of GDM. Despite a sunny environment, maternal vitamin D deficiency is still a fundamental health problem in Turkey. The purpose of this study identifies the possible link between vitamin D levels with GDM in the Turkish population.

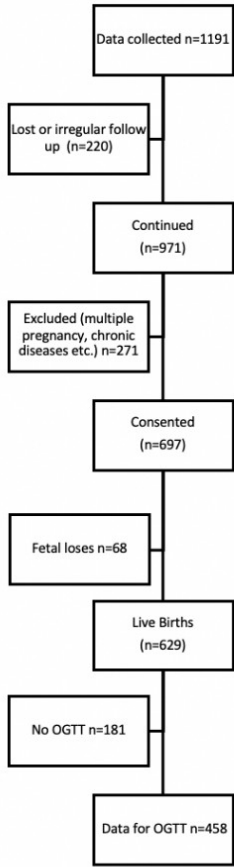
MATERIAL-METHODS: This retrospective cohort study included data of Pregnant women between December 2018 – March 2019 for antenatal screening in their first trimester. Plasma baseline 25- hydroxyvitamin D levels were measured at the time of the antenatal test. All patients had a regular supplemental vitamin D dose of 1000-1200 IU (9 drops) per day after the first trimester. In this study, mothers with vitamin D < 12 ng/mL were categorized as having severe vitamin D deficiency, women with < 20 ng/mL as a deficiency, and insufficiency as < 30 ng/mL.

RESULTS: For first-trimester screening, one thousand one hundred ninety-one pregnant women were admitted. Seven hundred thirty three women were excluded due to various exclusion criteria. Four hundred fifty-eight eligible women were enrolled. In this study, we interrogated the link between gestational diabetes mellitus and first-trimester vitamin D deficiency. We could not find a significant relationship between vitamin D deficiency measured in the first trimester and the development of gestational diabetes mellitus. In our study, 9.8% of the patients were diagnosed with GDM during their pregnancy. The high BMI value of the group we analyzed can be shown as the goal. We found that 86% of the patients in this study had vitamin D deficiency.

CONCLUSIONS: All pregnant women started high-dose vitamin D replacement in the first trimester, reducing the potential effect. The low number of participants in the study, being in the same region and a single season period, can be considered a limiting factor. Another interesting part of the analysis is that vitamin D deficiency is particularly frequent even though it is located in sunny geography. Nevertheless, it should not be forgotten that an examination is made during the winter period. As the strengths of the study, the vitamin D levels of the patients were examined before GDM diagnosis. Also, it is the first study examining the relationship between vitamin D deficiency and GDM in Turkey. There is a need for more extensive prospective studies based on the Turkish population and the determination of vitamin D limit levels on a population basis.

Keywords: Vitamin D, Gestational diabetes mellitus, deficiency, insufficiency, first trimester

Flow chart of study subjects



Flow chart of study subjects

Socio-demographic information

Parameters	All data(n = 458)	Women with gestasyonel diabetes mellitus (n=45)	Women with normal glucose levels (n=413)	P-value
Age(years)±	27.79±5.08	30.42±5.17	27.51±4.99	<0.001
BMI (kg/m2)±	25.18±4.65	27.7±4.98	24.91±4.54	<0.001
BMI categories, N %				0.023
<18.5	21(4.5)	0(0)	21(5.1)	
18.5-24.9	222(48.5)	17(37.8)	205(49.6)	
25.0-29.9	145(31.7)	15(33.3)	130(31.5)	
>30	70(15.3)	13(28.9)	57(13.8)	
Nulliparous	173(37.8)	9(20)	164(39.7)	0.010
Multiparous	285(62.2)	36(80)	249(60.3)	0.010
First degree family history of type 2 diabetes, N (%)				
No	257(56.1)	18(40)	239(57.9)	0.022
Yes	201(43.9)	27(60)	174(42.1)	0.022

Values represent number (percentages) “±” indicates values as mean ± SD

Vit D levels

Parameters	All data (n=458)	Women with gestational diabetes mellitus(n=45)	Women with normal glucose levels (n=413)	P-value
Vit D levels median (min-max)	10.45(5-53.05)	10.71(5-53.05)	8.67(5.03-31.66)	0.240
Vit D catégories n(%)				0.236
Vit D ≤ 12	278(60.7)	31(68.9)	247(59.8)	
Vit D > 12	180(39.3)	14(31.1)	166(40.2)	
Vit D catégories n(%)				0.691
Vit D < 20	394(86)	36(80)	358(86.7)	
Vit D > 20	64(14)	9(20)	55(13.3)	
Vit D catégories n(%)				1.000
Vit D < 30	446(97.4)	44(97.8)	302(96.5)	
Vit D > 30	12(2.6)	1(2.2)	11(3.5)	

SS-033 [Obstetri Genel]

Can first trimester protein to creatinine ratio, blood pressure and inflammatory markers predict miscarriage?

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AIM: To investigate whether protein to creatinine ratio (PCR), systolic/diastolic blood pressure, neutrophil to lymphocyte ratio (NLR), platelet to lymphocyte ratio (PLR) and plateletcrit (PCT) could predict early pregnancy loss.

METHODS: A total of 25 early pregnancy loss was compared with 95 participants in the control group who had given birth at term who

applied to Mersin City Training and Research Hospital between 2018-2020 retrospectively. All women were in low risk for pregnancy and had no acute or chronic systemic diseases that could effect the vital signs and laboratory parameters. The blood samples collections and blood pressure measurements were collected for each participants at the initial pregnancy examination. Blood pressures were measured at least after 10 min rest with the same calibrated blood pressure monitor. Maternal demographic characteristics, complete blood cell parameters, including NLR, PLR, PCT and spot urine PCR were measured and compared between groups.

RESULTS: Initial pregnancy examinations were similar between the 2 groups (6.5 ± 1.8 vs 6.8 ± 1.5 week $p > 0.05$). Median miscarriage week was 7(5-14). There were no statistically significant differences between the two groups in terms of NLR, PLR, PCT and PCR (all $p > 0.05$). Systolic blood pressure (SBP) was significantly higher (114.40 ± 8.69 mmHg vs 106.58 ± 10.87 mmHg) in the early pregnancy loss group than in the controls ($p < 0.001$). ROC curve analysis showed that a systolic blood pressure equal or greater than 107.5 mmHG was predictive for miscarriage with a sensitivity of 100% and specificity of 45%.

CONCLUSION: Although PCR, NLR, PLR and PCT (platecrit) are cheap and practical tests, they are useless in early pregnancy loss prediction. Our findings suggest that increased SBP may be a sign of early pregnancy loss.

Keywords: First trimester, miscarriage, prediction

Comparison of demographic and laboratory findings

	MC group (n:25)		Control group (n:75)		p value
	Mean \pm SD	Median (min-max)	Mean \pm SD	Median (min-max)	
Age (years)	29.5 \pm 6.8	29(19-41)	28.6 \pm 5.5	28(18-42)	0.581
Gravidity	3.1 \pm 2.3	3 (1-11)	3.3 \pm 1.8	3 (1-9)	0.347
Parity	1.5 \pm 1.5	1 (0-6)	1.7 \pm 1.4	1 (0-7)	0.410
No. of prior VD	1.2 \pm 1.6	1 (0-6)	1.2 \pm 1.5	1 (0-7)	0.956
No. of prior CS	0.3 \pm 0.6	0 (0-2)	0.5 \pm 0.8	0 (0-4)	0.147
No. of prior MC	0.6 \pm 1.1	0 (0-4)	0.6 \pm 1.1	0 (0-5)	0.794
Initial examination (weeks)	6.5 \pm 1.8	6 (5-12)	6.8 \pm 1.5	7 (4-9)	0.128
SBP (mmHg)	114.4 \pm 8.7	110 (110-150)	106.6 \pm 10.9	110 (80-160)	0.001
DBP (mmHg)	70.8 \pm 9.1	70 (60-100)	67.5 \pm 7.0	70 (50-90)	0.100
PCR	0.11 \pm 0.06	0.09 (0.05-0.28)	0.010 \pm 0.08	0.09 (0.04-0.59)	0.422
NLR	2.7 \pm 1.3	2.3 (1.4-6.9)	2.9 \pm 1.1	2.7 (2.1-7.0)	0.104
PLR	150.1 \pm 47.4	140.1 (89.7-272.4)	139.9 \pm 38.7	136.5 (63.2-272.1)	0.399
Pct(%)	0.23 \pm 0.05	0.22 (0.17-0.37)	0.24 \pm 0.04	0.23 (0.13-0.39)	0.361

SS-034 [Obstetri Genel]

Evaluation of the predictive role of anterior uterocervical angle in preterm labor in single gestation through meta-analysis

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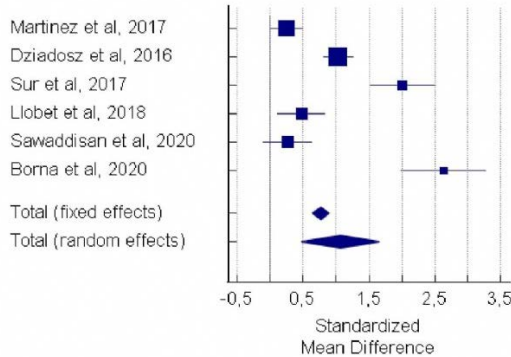
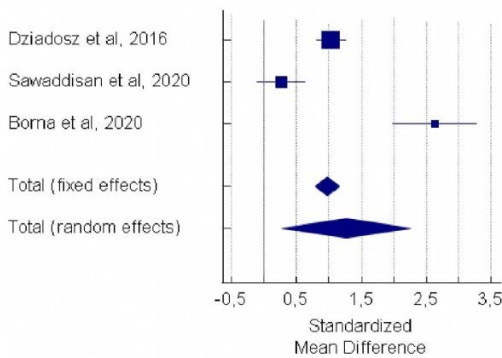
AIM: Since preterm labor prediction with uterocervical angle (UCA) is a new subject, systematic reviews are limited. These show that better evidential scientific data are needed to clarify UCA's success in predicting preterm labor. Meta-analysis could be an appropriate choice in this situation by increasing the sample size and combining similar reports of the studies. Therefore, we aimed to demonstrate the relationship between UCA and preterm labor more clearly and reliably with this meta-analysis, for the first time in the literature.

METHOD: In this context, "uterocervical angle, cervical angle, angle, cervix, cervical, preterm, and preterm labor" keywords were used and PubMed, Medline, ClinicalKey, Scopus, Science Direct, Web of Science, and Google Scholar database were searched between 1 January 2010 and 27 December 2020. The literature search identified 585 articles and finally 6 studies were included in the analysis.

RESULT: As a result of Egger's test ($p = 0.220$) and Begg's test ($p = 0.188$), it was determined that there was no publication bias. Cochran's Q test revealed that there was heterogeneity ($p < 0.001$, $I^2 = 94.49\%$). There was a significant difference between the patient and control groups ($p < 0.001$). As a result of this study, uterocervical angle was found to be associated with a higher risk of preterm delivery in the overall effect. In addition, there was a significant relationship between UCA and preterm labor below 37 weeks.

CONCLUSION: This meta-analysis demonstrated that the UCA measured in the second trimester is quite successful in predicting preterm labor both before 34 and 37 weeks. New studies are needed to increase the diagnostic accuracy of UCA in preterm labor with more specific patient groups and cut-off values that can be standardized.

Keywords: meta-analysis, preterm labor, uterocervical angle

Forest graph in evaluating the success of anterior uterocervical angle in predicting preterm labor**Forest graph in evaluating the success of anterior uterocervical angle in predicting preterm labor before 37 weeks****SS-035 [Obstetri Genel]****Human epididymis protein 4 and fetal lung maturity**

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Aim: The epithelia of the respiratory and reproductive tracts have been shown to synthesize HE-4 which is a protease inhibitor. This study aims to document the maternal and fetal cord blood levels of human epididymis protein-4 (HE-4) in term and preterm newborns in order to investigate the possible physiological role of HE-4 in fetal lung development.

Materials and Methods: This cross-sectional study was conducted in a university-affiliated hospital between April 2018 and September 2018. The study population consisted of cesarean section deliveries after 24 weeks of pregnancy. Both maternal and umbilical cord HE-4 levels (mHE-4 and uHE-4, respectively) were measured using chemiluminescent microparticle immunoassay. Amniotic fluid was sampled from each case to determine the lamellar body count (LBC) as the gold standard test for lung maturation. All the parameters, including the uHE-4 levels, were compared between the term delivery (≥ 37 weeks) (n=52) and preterm delivery (24–37th weeks) (n=30) groups. The best cut-off value of uHE-4 for prediction of fetal lung maturity was calculated.

Results: There were no statistically significant differences between the groups regarding the demographic data. The mHE-4 levels did not statistically significantly differ between the groups ($p>0.05$) whereas the uHE-4 level of the preterm newborns was significantly higher than that of the term newborns ($p<0.05$). There was a significant negative association between the uHE-4 level and LBC ($r=-0.389$; $p<0.001$). The uHE-4 level was the only statistically significant fetal parameter indicating fetal lung maturity confirmed by LBC. At a cut-off value of 281 pmol/L, uHE-4 had 96.8% sensitivity, 45% specificity, 84.5% positive predictive value, and 81.8% negative predictive value for fetal lung maturity.

Conclusion: Although the exact physiological role of HE-4 has not yet been elucidated, this preliminary study supports the idea that HE-4 plays a role in fetal lung maturation to some extent.

Keywords: human epididymis protein 4 (HE-4), fetal, lung maturity

SS-037 [Perinatoloji]**Does the Previous Route of Delivery Affect Uterine Artery Blood Flow?**

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BACKGROUND-AIM: We aim to assess the effects of previous cesarean delivery (CD) and placental location on first and second-trimester uterine artery Doppler indices and first-trimester PAPP-A levels (mom) in subsequent pregnancy.

METHODS: This retrospective cohort study was conducted among pregnant women referred to our maternal fetal medicine unit for the first-trimester anatomic survey and aneuploidy screening between June 2015 and December 2019. This study was approved by the local ethics committee of our institution, Acibadem University Medical Research Ethical Committee (approval number:2019-11/21). Multiplets, fetus with structural anomalies or aneuploidies, pregnant women who have a history of more than one delivery, pregnancy by ART (Assisted Reproductive Techniques), previous uterine surgery other than cesarean section, acetylsalicylic acid, and low molecular weight heparin use during pregnancy and maternal history of chronic hypertension, overt diabetes were excluded from the study. Our original cohort was composed of a total of 1500 cases, after the

exclusions and incomplete clinical record, 228 cases remained for the statistical analysis.

Uterine artery Doppler examination was performed transabdominal at 11-14 weeks of gestation and 18-23 weeks of gestation. The pulsatility index of both uterine arteries was measured, and mean PI was calculated. If an early diastolic notch in the uterine artery was seen, it was recorded. Diastolic notch was defined as a persistent decrease in blood flow velocity in early diastole below the peak diastolic velocity. Uterine artery PI's were considered abnormal if the values were >95 percentile. Also, multiples of the median (MoM) for uterine artery were calculated for each patient by a formula: $PI\ MoM = PI\ values\ of\ the\ patient / the\ median\ PI\ values\ based\ on\ gestational\ age$. MoM values of uterine artery PI's were calculated for both exams.

RESULTS: 228 cases who had a history of previous delivery were classified as vaginal delivery group (Group 1, n=102) and cesarean delivery group (Group 2, n=126). One hundred eight cases had anteriorly located placenta, and 101 of cases had posteriorly located placenta. Remaining 19 cases had fundal or lateral placental locations. The vaginal delivery group was younger than the cesarean delivery group. PI values (MoM), slightly higher in the vaginal delivery group in both exams although this difference was not statistically significant for the 1st and 2nd trimester uterine artery Doppler PI MoM values. Uterine artery PI index MoM values were not different between the cases with anterior placenta and posterior placenta. In women with previous vaginal delivery and cesarean section, no significant difference was found in the 1st and 2nd-trimester uterine artery PI MoM values by placenta location. The intrauterine growth restriction rate was higher in the cesarean delivery group ($p=0.001$). Uterine artery notch was seen in 11 cases (10.7%) from the previous vaginal delivery group and 8 (6.3%) from the previous cesarean delivery group ($p=0.34$). The persistence rate of uterine artery notch in the second-trimester exam was similar ($p=0.34$).

CONCLUSION: In this study, uterine blood flow indices between the previous cesarean and vaginal delivery groups are compared and no significant difference between patients with different delivery routes is observed.

Keywords: Cesarean delivery, Doppler Sonography, Pulsatile index, Umbilical artery, Uterine Artery

SS-038 [Perinatoloji]

Pregnancy outcomes in women with epilepsy: A hospital-based retrospective study

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GOAL: In this study, we aimed to evaluate the clinical and demographic characteristics, maternal and fetal outcomes and the adverse effects of antiepileptic drugs (AEDs) in pregnant women with epilepsy (WWE).

METHODS: 280 pregnant WWE who applied to the Perinatology Clinic of Zekai Tahir Burak Women's Health Training and Research Hospital over a three-year period were included in this retrospective study. 20 of 280 cases were excluded from the study because of early fetal loss before 24 weeks of gestation. Study group (n=260) was also divided into two subgroups; pregnant WWE using AEDs (n=185) and using no AEDs (n=75). Control group was consisted of 260 healthy pregnant women who delivered at the same time period. For pregnancy outcomes; the mode of delivery, gestational age at delivery, multiple pregnancy status, pre-eclampsia, gestational diabetes, newborn's birth weight, preterm birth, fetal major congenital malformations, 5th minute Apgar scores and the need for the neonatal intensive care unit were analyzed.

Findings and RESULTS: Maternal age, parity, body mass index, number of multiple pregnancies were similar between study and control groups. We did not find any significant difference between the study group and the control group in terms of gestational diabetes, preeclampsia, major congenital malformations and 5th minute Apgar scores. However gestational age at delivery and mean newborn weight were statistically significantly lower ($p<0.001$) and the incidence of cesarean section and admission to the neonatal intensive unit care ($p<0.005$) were statistically significantly higher in pregnant WWE. When the subgroups were compared, it was observed that the epileptic women receiving AEDs treatment during pregnancy were more likely to have preterm births [odds ratio (OR)= 1.9; 95% confidence interval (CI): 1.1-3.3], small for gestational age (SGA) (OR= 2.9; CI: 1.5-5.5) and low birth weight (LBW) infants (OR= 2.0; CI: 1.0-3.8) than the women without epilepsy. The risk of adverse outcomes were similar in pregnant WWE not using AEDs and the healthy pregnant women in the control group.

CONCLUSION: In this study, we observed more adverse maternal and fetal outcomes in women with epilepsy compared to healthy pregnant women. Furthermore, newborns of epileptic women who use AEDs were found to have an increased risk of SGA, LBW, prematurity and neonatal critical care admission. Therefore the most rational approach in the treatment of epileptic pregnancies would be to use the drug as monotherapy, at the lowest possible dose and with the least adverse effects, and to monitor the pregnant women closely for complications. These findings highlight the importance of multidisciplinary follow-up of pregnant WWE patients by both neurologist and obstetrician.

Keywords: Antiepileptic drug, epilepsy, maternal outcome, perinatal outcome, pregnancy

SS-040 [Ürojenekoloji - Rekonstrüktif cerrahi]

Comparison of sacrospinous fixation methods in the treatment of pelvic organ prolapse

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AIM: Pelvic organ prolapse (POP) impairs women's quality of life in many ways by causing physical, psychological, and sexual troubles. Vaginal hysterectomy (VH) is a traditional approach for treating POP. Sacrospinous fixation (SSF) is an important surgical procedure for providing apical support to the vaginal cuff and restoring it. In this study, we aimed to compare the results of unilateral (UL) SSF and bilateral (BL) SSF, which we performed in addition to VH as surgical procedures in cases with stage 3-4 symptomatic uterine prolapse.

METHOD: Our study consisted of patients who applied to our clinic with the complaint of uterine prolapse and were found to have stage 3-4 symptomatic uterine prolapse during urogynecological examinations. The Pelvic Organ Prolapse Quantification system (POP-Q) was used to determine the stage of POP. Exclusion criteria included gynecological malignancy, acute infection of the reproductive system or other organs, inability to tolerate surgery or anesthesia, and urinary incontinence. Patients' demographic information such as age, parity, body mass index (BMI), peri- and postoperative complications were recorded. Urogynecological examinations and POP-Q assesment of all cases were performed again 12 months after the operation, and patients were questioned about complaints such as constipation and pelvic pain. In all cases, ULSSF or BLSSF and colporrhaphy anterior and colporrhaphy posterior procedures were performed in addition to VH as surgical procedures. The SSF procedure was performed with the sacrospinous fixator device SONAY, which we designed, manufactured, and patented. Consequently, the SSF procedure was performed with minimal dissection, the risk of complications was reduced, and the operation time was shortened.

RESULTS: Overall, 42 patients were operated on, according to our inclusion criteria (29 patients with VH+ULSSF and 13 with VH+BLSSF). Mean ages of the groups were 69.9 ± 5.69 and 67.8 ± 5.64 , respectively. No significant difference was observed between groups in terms of cardiovascular disease, diabetes, age, BMI, and parity ($p > 0.05$) (Table 1). Operation times were significantly different (88.5 ± 11.34 min. for the VH+ULSSF group and 97.7 ± 10.72 min. for the VH+BLSSF group) ($p = 0.017$). There was no statistical difference between the two groups in terms of anterior and posterior prolapse or urinary incontinence at the 12-month post-operative examination ($p > 0.05$) (Table 1). At the 12-month postoperative examination, complaints of pelvic pain and constipation were found to be statistically higher in the BLSSF group ($p = 0.041$ and 0.041 , respectively). In addition, ureteral obstruction, vaginal cuff prolapse, and death were not observed in any case in either group during the 12-month postoperative follow-up (Table 1).

CONCLUSION: Adding SSF to VH is one of the most effective and safe treatment options for POP, with low complication rates. The results of our study showed no advantage of the BLSSF procedure over the ULSSF procedure; on the contrary, it prolonged operation time and increased pelvic pain and constipation rates in the postoperative period.

More case studies are needed in this area to support our results.

Keywords: Pelvic organ prolapse, Sacrospinous fixation, Vaginal hysterectomy

Comparison of patient groups in terms of demographic and post-operative characteristics.

	ULSSF (n:29)	BLSSF (n:13)	p*
Age (year)	69.9 ± 5.69	67.8 ± 5.64	0,479
Parity	4.2 ± 1.15	4.3 ± 1.03	0,860
BMI (kg/m2)	27.5 ± 3.8	26.50 ± 4.69	0,459
Medical comorbidities			
No	17 (%58,6)	8 (%61,5)	
CVD	4 (%13,8)	2 (%15,4)	
DM	3 (%10,3)	1 (%7,7)	0,997
CVD+DM	3 (%10,3)	1 (%7,7)	
Thyroid dysfunction	2 (%6,9)	1 (%7,7)	
Operation time (min)	88.5 ± 11.34	97.7 ± 10.72	0,017*
Postop. Incontinence			
Yes	4 (%13,8)	2 (%15,4)	
No	25 (%86,2)	11 (%84,6)	0,892
Postop. Anterior prolapse			
Yes	4 (%13,8)	2 (%15,4)	
No	25 (%86,2)	11 (%84,6)	0,892
Postop. Posterior prolapse			
Yes	3 (%10,3)	1 (%7,7)	
No	26 (%89,7)	12 (%92,3)	0,787
Postop. Cuff prolapse			
Yes	0 (%0)	0 (%0)	
No	29 (%100)	13 (%100)	-
Postop. Constipation			
Yes	2 (%6,9)	4 (%30,8)	
No	27 (%93,1)	9 (%69,2)	0,041*
Postop. Pelvic pain			
Yes	2 (%6,9)	4 (%30,8)	
No	27 (%93,1)	9 (%69,2)	0,041*
Postop. Ureteral obstruction	0	0	-

* $p < 0.05$. ULSSF: Unilateral sacrospinous fixation, BLSSF: Bilateral sacrospinous fixation, BMI: Body mass index, CVD: Cardiovascular disease, DM: Diabetes mellitus

SS-041 [Ürojenekoloji - Rekonstrüktif cerrahi]

Comparison Of Four Surgical Techniques In The Treatment Of Vaginal Cuff Prolapse

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AIM: Vaginal vault prolapse (VVP), one of the late complications after hysterectomy, is a condition that causes serious morbidity in older women and there is still no consensus on the optimal surgical technique. This study aimed to present the results of four surgical techniques in VVP.

METHOD: In this retrospective study, 77 patients who were operated

on for VVP between 2010 and 2022 were included and all of the cases had a previous hysterectomy. Cases in which colpopexy was performed with concomitant hysterectomy and operations that did not end with the technique started, were excluded. Four surgical techniques were identified, as follows: laparotomic sacrocolpopexy (LPSC, n=27), laparoscopic sacrocolpopexy (LSSC, n=10), sacrospinous ligamentopexy (SSLP, n=31), and laparoscopic lateral suspension (LLS, n=9).

RESULTS: The mean age was statistically different among the groups ($p=0.003$), and the SSLP group was older. The body mass index, gravidity, parity, time since hysterectomy, stage of POP-Q (classification of pelvic organ prolapse), hospital stay, and delta hemoglobin values were similar among the groups ($p>0.05$). Mean operative time differed among groups (143.51 ± 31.46 vs 197.50 ± 62.46 vs 115.96 ± 51.29 vs 168.33 ± 53.20 min respectively, $p<0.001$). In the LSSC group, bladder injury was observed as an intraoperative complication in only one case. Early postoperative complications as surgical site infection (n=4, 3 belong to LPSC), fever of unknown origin (n=2, belong to LPSC and SSLP), nephrostomy due to ureteral injury (n=1, belong to LSSC), postoperative pulmonary dysfunction (n=1, belong to LSSC), and postoperative acute coronary syndrome (n=1, belong to LPSC) was detected, but there was no significant difference in the presence of complications among the groups ($p=0.274$). In the postoperative follow-up (mean 61.62 ± 36.95 months), new-onset incontinence of 2.6%, cystocele/rectocele of 6.5%, pelvic pain of 1.3%, and recurrent VVP of 10.4% were observed, and late postoperative complication rates were statistically similar among groups ($p=0.62$). There were 3 (11.1%) recurrences of VVP in LPSC, 4 (12.9%) in SSLP, 1 (11.1%) in LLS and 0 (0%) in LSSC ($p=0.838$).

CONCLUSION: The rates of postoperative complications and recurrence of VVP were similar among the groups, and the only statistical difference was in the duration of the operation. However, the surgery for VVP, which improves the quality of life of hysterectomized women, is quite difficult, protracted, and requires surgical skills, and further studies are needed for the optimal surgical technique in the treatment of VVP.

Keywords: vaginal vault prolapse, sacrocolpopexy, laparoscopic, laparotomy, sacrospinous ligamentopexy

SS-042 [Ürojinekoloji - Rekonstrüktif cerrahi]

Evaluation of the contribution of vaginal assistance in laparoscopic sacrohysteropexy

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AIM: Sacrohysteropexy operations are preferred as a uterus-sparing surgical technique in cases of uterine prolapse in young women of reproductive age. Although laparoscopic procedures offer a minimally invasive approach, prolonged operation times pose a separate problem. In this study, it was aimed to investigate the effect of vaginal assistance

in laparoscopic sacrohysteropexies.

METHOD: Cases of laparoscopic sacrohysteropexy (LSH) and vaginally assisted laparoscopic sacrohysteropexy (VALSH) performed between 2013 and 2022 were retrospectively reviewed. LSH is a uterine-preserving method preferred in young women with advanced uterine prolapse. Vaginal assistance in this surgical procedure is defined as the placement of the mesh on the cervix by vaginal rather than laparoscopic way. Operations that switched from laparoscopy to laparotomy, operations that did not comply with the defined surgical method, and reoperated patients were not included. Demographic and obstetric histories, classification of pelvic organ prolapse (POP-Q), duration of operation, and postoperative complications were recorded, presence of postoperative recurrent prolapse and new-onset incontinence were determined and all parameters were compared between the groups.

RESULTS: A total of 30 cases were detected in the LSH (n=20) and VALSH (n=10) groups and the mesh was used in all operations. Age, gravidity, and parity did not differ significantly between the groups ($p>0.05$), furthermore, only one patient in the LSH group was nulliparous and all the remaining patients had a vaginal delivery, none of whom was delivered by cesarean section. The body mass index was found to be significantly lower in VALSH compared to LSH ($p=0.39$). According to POP-Q, cervix, anterior, and posterior prolapse stages were not significantly different in both groups ($p>0.05$). The mean operation time was shorter in VALSH (162.5 ± 64.08 vs. 213.25 ± 58.72 min., $p=.039$). Postoperative complication rates did not differ significantly between the groups (%5 and %30, $p=0.095$), however, one case with bladder injury was detected in the LSH group, 3 cases with mesh erosion, fever of unknown origin, and fluid-electrolyte disturbances were detected in the VALSH group. In addition, there was no significant difference between the groups in postoperative delta hemoglobin values ($p=0.112$). The mean postoperative follow-up time was 58.87 ± 30.41 months and recurrence of uterine prolapse was not detected in any of the cases. The rates of preoperative urinary incontinence and postoperative new-onset urinary incontinence did not differ significantly between the two groups ($p>0.05$).

CONCLUSION: Vaginal assisting of LSH did not increase complications and poor postoperative outcomes, but significantly shortened the duration of sacrohysteropexies, which are quite difficult, protracted, and require surgical skill.

Keywords: sacrohysteropexy, laparoscopy, vaginal assist, uterine prolapse

SS-043 [Jinekoloji Genel]

McCall Culdoplasty vs. Vaginally Assisted Laparoscopic Sacrocolpopexy in the Treatment of Advanced Stage Uterine Prolapse

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AIM: The primary objective of this study was to compare the anatomic outcomes of vaginally assisted laparoscopic sacrocolpopexy (VALS) with those of McCall Culdoplasty (McCC) in patients undergoing concurrent hysterectomy.

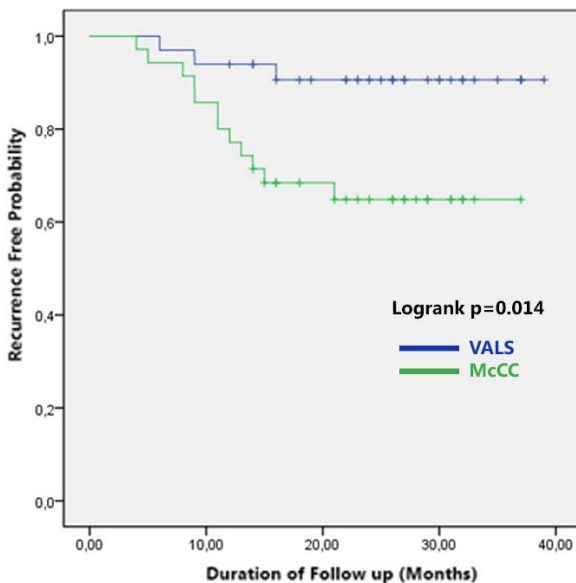
METHODS: This randomized controlled study presents outcomes of 68 patients who underwent hysterectomy and vaginal suspension for apical prolapse \geq stage III according to the POP-Q system between October 2017 and December 2020. Among these patients, 33 underwent VALS, and 35 underwent McCC. Clinical features, surgical data, concomitant surgical procedures, postoperative complications, and recurrence rates were assessed.

RESULTS: The mean follow-up duration was 25.5 ± 7.63 months and 25.6 ± 5.96 months in the VALS and McCC groups. The anatomic cure was observed in 30 (90.9 %) patients in the VALS group and 23 (65.7%) patients in the McCC group ($p=0.031$). Postoperative 1-year subjective success was achieved in 31 (93.9 %) patients in the VALS group and 25 (71.4 %) patients in the McCC group ($p=0.041$). Recurrence rates were higher in McCC in a maximum 70 months follow-up (log-rank test $p=0.014$). A comparison of the recurrence rates is shown in Figure 1. Two patients (6.1 %) in the VALS group and 8 (22.1%) in the McCC group were reoperated for POP ($p=0.121$). Mesh exposure rate after POP surgery was low, with only one (3%) patient in the VALS group and two sling mesh exposures (5.7%) were observed in the McCC group. All mesh exposures were excised.

CONCLUSION: VALS and McCC are surgical options for prolapse, and both operations have advantages and disadvantages. While McCC was associated with a shorter operation time, the VALS operation's subjective and objective success rates were significantly higher. Based on this study, it may be concluded that the McCC is not an effective procedure for advanced-stage uterine prolapse.

Keywords: apical prolapse, McCall culdoplasty, pelvic organ prolapse, vaginally assisted laparoscopic sacrocolpopexy

Figure 1



Comparison of recurrence rates after VALS and McCC using Kaplan-Meier curves

SS-044 [Endoskopi]

Utilization of V-NOTES for High Uterosacral Suspension; Preliminary Results of 19 Patients

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OBJECTIVE: Procedures to repair pelvic organ prolapsus reported to have a high recurrence rate, and various techniques continue to be evaluated to reach the optimal benefit for the patients.1 Procedures with synthetic mesh are being abandoned in some countries, and uterosacral ligament suspension as a native tissue repair has gained popularity.2 Concurrently, minimally invasive techniques are being adopted in most fields, and in the last decade, vaginal natural orifice transluminal endoscopic surgery (vNOTES) has been studied in minimally invasive surgery.3 This retrospective cohort study aims to assess preliminary results of our center utilizing vNOTES for high uterosacral ligament suspension (HULS) after vaginal hysterectomy.

Design:Database of medical records scanned for HULS and vaginal hysterectomy(VH) procedures for apical prolapse.. We reached a total of 19 patients who underwent VH+ HULS(vNOTES) between 2018 and 2022 in our center. 19 patients were enrolled follow-up appointments

METHOD: Patients who underwent VH+ HULS(vNOTES) procedure were examined three months after surgery. Operation data, operative and postoperative complications, preoperative and postoperative pelvic organ prolapse quantification(POP-Q) scores were collected. Additionally, all patients answered Pelvic Organ Prolapse Distress Inventory 6(POPDI-6), Urinary Distress Inventory, short-form(UDI-6), and Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire short form(PISQ-12) pre and postoperatively.

RESULTS: Preoperative prolapse stages distributed as follows; 8 patients had stage 2, 7 patients had stage 3, and 4 patients had stage 4 prolapse. Mean operation duration was 151.5 ± 33.55 (mean \pm std. dv). Mean blood loss was 1.84 ± 1.16 (mean \pm std.dv.) Mean hospital admission was 3.15 ± 2.85 (mean \pm std.dv.) days after surgery. No operative complication occurred, and all patients had cystoscopy after the operation, and jet stream from both ureters was noted.1 patient had urinary tract infection after surgery which was treated with antibiotics. 3 patients had stage 2 cystocele at 3 months follow-up. No apical prolapse recurrence were present. Pre and postoperative scores for questionnaires as follows. POPDI-6 were 16-6(median- IQR) and 3-2 (median- IQR) respectively; UDI-6 were 1-5(median- IQR) and 0-2(median- IQR) respectively; PISQ-12 were 13-9(median- IQR) and 11-5(median- IQR) respectively($p<0.05$ for all).

CONCLUSION: vNOTES provides sufficient visibility of ureters and pelvic organs to perform HULS. In addition, reduces the possible ureteral complications and allows opportunistic salpingectomy/oophorectomy. Prospective randomised studies may provide a better profile in the future. Nevertheless, we believe it is a safe alternative to laparoscopic

HULS, eliminates abdominal incisions, mesh complications and increases patient comfort

Keywords: Pelvic Organ Prolapse, V-NOTES, Vaginal Hysterectomy

SS-045 [Ürojinekoloji - Rekonstrüktif cerrahi]

Requirement of additional tests in the diagnosis of Stress Urinary Incontinence in patients with Diabetes Mellitus (DM), Tertiary Center Experiences

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OBJECTIVE: Stress urinary incontinence (SUI) is parallel to the increase in intra-abdominal pressure, which has become the most important health, psychosocial, hygienic and economic problem by the International Incontinence Society (ICS), negatively affects the quality of life, can be observed objectively, and is caused by weakness of the urethral sphincter and pelvic floor. It is a common urogenital disorder defined as involuntary urinary incontinence in the absence of detrusor contraction that develops as a result of coughing, sneezing, and heavy lifting. Although methods such as changing habits and exercise are tried during the treatment process, surgical procedures are applied to most patients. In cases of additional diseases such as DM, which may have neurogenic effects, more detailed evaluations may be required in the diagnosis and treatment of the patient. In our study, we planned to investigate the correlation between the patient's incontinence anamnesis, the stress test as a simple physical examination test, and the outcome diagnosis based on the urodynamic test.

METHODS: 225 patients who applied to the Etlik Zübeyde Hanım Training and Research Hospital Urogynecology Polyclinic with the complaint of urinary incontinence, whose urodynamic test was planned for the final diagnosis, were included in the study. Among the patients included in the study, 44 patients with a diagnosis of DM and followed up by the internal medicine services were determined as Group 1 and 181 patients without a diagnosis of DM were determined as Group 2. According to the anamnesis of the patients included in the study, they were grouped as SUI and others according to the stress test result, which is a simple SUI test, and SUI and others according to the Urodynamic result. The effectiveness of the anamnesis and stress test were evaluated by calculating the sensitivity specificity test validity (TV) and Positive Predictive Values (PPD) between anamnesis urodynamics and stress test urodynamics in both groups.

RESULTS: Of the 225 patients included in the study, 44 (19.6%) were in Group 1 and 181 (80.4%) were in Group 2. In group 1, 6.25% sensitivity between anamnesis and urodynamic test results 82.10% specificity 54.50% TD 16.70% PPD between stress test urodynamics 62.50% sensitivity 67.90% specificity 65.90% TD 52.60 PPD value was found. (Table 1,2) In Group 2, 52.30% sensitivity between anamnesis and urodynamic test results 76.80% specificity 65.20% TD 67.20% PPD between stress test urodynamics 70.90% sensitivity 69.50% specificity 70.20% TD 67.80% PPD value was found. (Table 3,4)

CONCLUSION: We think that the results of our study, in which we investigated the anamnesis and stress test effectiveness in the diagnosis of SUI by comparing the anamnesis and stress test results with the urodynamic results, will be a guide for our colleagues working in centers that do not have the opportunity for further examination. We think that anamnesis and stress test are not sufficient for diagnosis, especially in cases of additional diseases that cause neurological problems such as DM, and further investigations are necessary. In order to avoid unnecessary surgeries after the diagnosis of SUI, we recommend a multidisciplinary approach in the history, physical examination, diagnosis and treatment processes of the patients.

Keywords: Stress urinary incontinence, Diabetes Mellitus, Test validity (TV), Positive Predictive Values (PPD)

Table 1. Group 1 Anamnesis / Urodynamic result comparison

	Urodynamic result	SUI +	SUI -
Anamnesis	Total Patient Grup 1 (n=44)	16	28
SUI +	6	1	5
SUI -	38	15	23

Sensitivity 6,25% Specificity 82,10% Test validity (TV) 54,50% PPD 16,70%

Table 2. Group 1 Stress Test / Urodynamic result comparison

	Urodynamic result	SUI +	SUI -
Stress Test	Grup 1 Total Patient (n=44)	16	28
SUI +	19	10	9
SUI -	25	6	19

Sensitivity 62,50% Specificity 67,90% Test validity (TV) 65,90% PPD 52,60%

Table 3. Group 2 Anamnesis / Urodynamic result comparison

	Urodynamic result	SUI +	SUI -
Anamnesis	Grup 2 Total Patient (n=181)	86	95
SUI +	67	45	22
SUI -	114	41	73

Sensitivity 52,30% Specificity 76,80% Test validity (TV) 65,20% PPD 67,20%

Table 4. Group 2 Stress Test / Urodynamic result comparison

	Urodynamic result	SUI +	SUI -
Stress Test	Grup 2 Total Patient (n=181)	86	95
SUI +	90	61	29
SUI -	91	25	66

Sensitivity 70,90% Specificity 69,50% Test validity (TV) 70,20% PPD 67,80%

SS-046 [Ürojenekoloji - Rekonstrüktif cerrahi]

Comparison of the Symptoms With the Urodynamic Test on the Patients With Urinary Incontinence

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OBJECTIVE: To compare the diagnosis based on the urodynamic test with the outcome of the urodynamic test results on the patients who had the complaints of urinary incontinence anamnesis.

MATERIAL-METHOD: Between January 2015 and August 2019, 148 patients having applied with the complaints of urine leaking to Mustafa Kemal University of Education and Research Hospital Obstetrics and Gynecology Clinic were classified and compared to their urodynamic results. Based on these symptoms, the negative and positive predictive results of the diagnosis were found.

RESULTS: Urodynamic study was carried out on the patients having applied with the complaints of stress incontinence, urge incontinence, and mixt incontinence. There were stress incontinence's complaints on 80, urge incontinence's complaints on 42, and mixt incontinence's complaints on 26 of the patients. According to the revealed urodynamic results, stress incontinence on 40 patients, overactive bladder on 15 patients, and mixt incontinence on 5 patients were detected. Urodynamic results were normal on 20 patients. Therresults of the urodynami were compared with symptomatology.

The diagnosis' sensitivity put forward with symptoms 83 %, specificity 60 %, PPD 50 %, NPV 88 % for stress incontinence and for overactive bladder, the sensitivity 45 %, specificity 79 %, PPD 50 % and NPV 76 % were found. And for mixt incontinence, the sensitivity 55% specificity 87 %, PPD 38 % and NPV 93 % were found.

CONCLUSION: Symptoms of a patient are weak modifiers for diagnosing on incontinence. The final diagnosis must be confirmed with urodynami for the patients whose operation has been planned or accurate diagnosis cannot be reached by simple uroynaecologic tests.

Keywords: urodynamics, incontinence, sensitivity

SS-047 [Ürojenekoloji - Rekonstrüktif cerrahi]

Translabial ultrasound of TOT (Trans Obturator Tape) mesh erosion; comparing to physical examination

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Objective: To assess transobturator mesh placement in symptomatic patients after surgery using translabial ultrasonography (US).

Methods: A retrospective observational study was performed between January and April 2022, to evaluate patients presenting with complaints after transvaginal mesh implantation for the treatment of stress urinary incontinence or pelvic organ prolapse. The clinical and translabial US findings were compared with physical examination with a focus on mesh location, erosion, and extrusion.

Results: A total of 63 consecutive patients (mean age 50,51 years) were evaluated by history and physical examination and translabial US. The mean BMI of patients was 27 kg/m². The demographic and operational characteristics of the patients were summarized in Table 1. 5/63 (7,93%) of the patients were diagnosed with mesh erosion. Using translabial US of the mesh placement of symptomatic patients, ultrasound examination revealed 1 proximal, 3 midurethral and 1 distal urethral placement. The images of measurement of ultrasonographic mesh placement were shown in Figure 1. On physical examination of patients, all of the patients had visible mesh in vaginal examination with speculum placement. Translabial US was not superior physical examination in identifying mesh erosion. Speculum examination and findings of the patients were shown in Figure 2.

Conclusion: Translabial US can identify the mesh material used to treat stress urinary incontinence and pelvic organ prolapse. It provides additional information on sling type, mesh location, and morphology compared with the clinical findings and could help in surgical planning and counseling. However its clinical utility should be precisely determined for appropriate use. Prospective clinical studies evaluating the reliability of this technique in larger patient populations are warranted.

Keywords: translabial ultrasonography, tot, mesh, erosion

Figure1.



Translabial ultrasonography images of patients with mesh erosion (A) Case 1. (B) Case 2. (C) Case 3. (D) Case 4. (E) Case 5. B, bladder; S, suburethral sling; U, urethra

Figure2.



Speculum examination and findings of the patients

Table1.

	Age (y)	BMI (kg/m ²)	Surgery Date	Type of Surgery	Dyspareunia	Pelvic Pain	Voiding Dysfunction	Stress Urinary Incontinence (SUI)	Urgency Urinary Incontinence (UII)
Case 1	52	29,68	13.02.2020	TOT,TAH,BSO	YES	YES	YES	YES	YES
Case 2	54	22,03	10.01.2020	TOT,CP	NO	YES	NO	NO	NO
Case 3	61	33,20	08.09.2020	TOT,TAH,BSO,CA	YES	YES	YES	YES	YES
Case 4	45	22,03	30.03.2021	TOT,TLH,BSO	YES	NO	NO	NO	YES
Case 5	60	32,46	23.10.2020	TOT	YES	YES	YES	NO	NO

The demographic, operational and symptomatic characteristics of the patients

Table2.

	Mesh Thickness(mm)	Urethra Length(mm)	Location of the Mesh on the Urethra (mm)	Place of Mesh
CASE 1	4,10	37,67	16,56	Midurethral
CASE 2	2,74	30,80	9,17	Anterior
CASE 3	2,88	43,56	20,08	Midurethral
CASE 4	5,92	37,62	29,01	Posterior
CASE 5	1,74	41,34	18,00	Midurethral

Translabial ultrasonography findings.

SS-048 [Ürojenekoloji - Rekonstrüktif cerrahi]

Does intraoperative Cough Stress Test (CST)/Crede Maneuver reduce the risk of urinary retention in patients undergoing Transobturator Tape (TOT)?

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Objective We aimed to investigate the effect of adjusting mesh tension with intraoperative Cough Stress Test (CST) or Crede Maneuver (CM) on voiding dysfunction or urinary retention in the early postoperative period of the Transobturator Tape (TOT) procedure, which is one of the frequently used midurethral sling methods in the surgical treatment of stress urinary incontinence.

Method Between January 2018 and March 2022, 84 patients who were diagnosed with pure stress urinary incontinence (SUI) or SUI dominant Mixt Type Urinary Incontinence (MUI) and treated with TOT using 'outside-in' technique, were retrospectively analyzed. In the first group (n=60), the mesh tension was adjusted intraoperatively, after the bladder was filled with 300ml of methylene blue, with the CM under general anesthesia or with the CST under spinal anesthesia by one surgeon. In the second group (n=24), the mesh was placed tension-free with Metzenbaum scissor between the urethra and the tape, without a cough test. The primary outcome of the study was occurrence of voiding difficulty or urinary retention (≥ 250 ml residual urine) after urinary catheter removal on the postoperative first day, the secondary outcome was objective urinary incontinence cure rates measured by negative CST in the early postoperative period.

Results The mean ages were 50.5 ± 8.5 years and 50.7 ± 9.3 years in Group 1 and Group 2 respectively. Body Mass Index (BMI) and concurrent Pelvic Organ Prolapse were statistically significantly higher

in the 2nd group than in the 1st group (27.2 ± 3.5 kg/m² vs 29.7 ± 5.8 and %30 vs %54.1). There was no significant difference in the proportion of women with occurrence of voiding difficulty or urinary retention between the two arms (42.9 "CST/CM" group versus 41.4 in the "no CST/CM" group; p=0.8). Efficacy data at postoperative two weeks period were not significantly different between groups (CST was positive %5 in Group 1 versus %0.4 Group2; p=0.8).

Conclusion Our data suggest that intraoperative adjustment of TOT mesh with CST or CM does not have a positive effect on voiding difficulty or urinary retention nor affect efficacy.

Keywords: Cough Stress Test, Crede Maneuver, Stress Urinary Incontinence (SUI), Transobturator Tape

Table 1

	Group 1	Group 2	
Age	50.5 ± 8.5	50.7 ± 9.3	p: 0.47
BMI	27.2 ± 3.5	29.7 ± 5.8	p: 0.012*
Parity	3.2 ± 1.9	4.1 ± 1.9	p: 0.1
Concurrent Surgical Procedure	33/60 (%55)	12/24 (%50)	p: 0.2
Concurrent Pelvic Organ Prolapse	18/60 (%30)	13/24 (%54.1)	p: 0.038*

Table 2

	Group 1	Group 2	
Postvoid residual urine	42.9 (0-300)	41.4 (0-110)	p: 0.8
Cough Stress Test	3/60 (%5)	1/24 (%4)	p: 0.8

SS-049 [Jinekoloji Genel]

Does HPV positivity affect endometriosis clinic?

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INTRODUCTION: Recent research and meta-analyses have focused on HPV virus as an infectious etiology of endometriosis. The theory of contamination or infectious theory was proposed to explain these findings in the endometriosis. It has been suggested that during retrograde menstruation, endometrial tissue and microorganisms are carried to the ovary and peritoneal cavity at previous studies. Moreover, some studies show an association between high-risk HPV infections in the upper genital tract with infertility and endometriosis, and a possible high risk HPV infection ascending from lower genital tract to upper genital tract. Some studies reported an association between HPV infection and endometriosis but still debatable.

DESIGN: Retrospective cohort study between January 2020 and December 2021 with 410 patients that diagnosed endometriosis with histologically, ultrasound finding and physical examination. HPV positive (n=208) and HPV negative (n=202) were the main groups of study. Patients and clinical findings were analyzed in two steps. First step of study, HPV positivity and endometrioma presence were together compared with clinical symptoms of endometriosis. Because endometrioma is an also risk factor for other clinical presentations, presence of an endometrioma is also evaluated with HPV analysis. Four different group was created. The groups were HPV (+)/ Endometrioma (+), HPV (+)/ Endometrioma (-), HPV (-)/ Endometrioma (+), HPV (-)/ Endometrioma (-). A comparison was made among four groups about the dyspareunia, dysmenorrhea, chronic pelvic pain and infertility. Moreover, infertility duration is also evaluated between groups. Second step of study, HPV and endometriosis symptoms were analyzed according to the HPV subtypes. HPV 16-18 and other

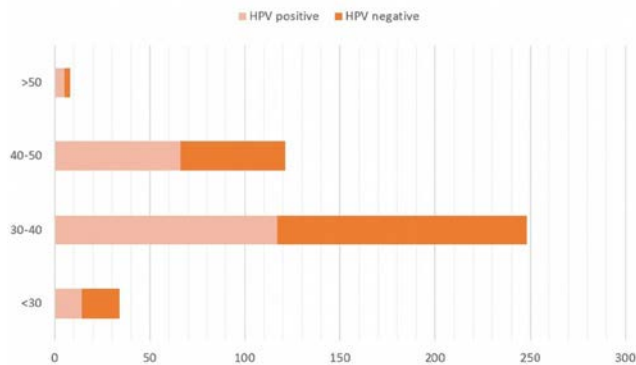
HPV types were the main groups to compare gynecologic symptoms of endometriosis separately. Second step is created for previous studies which identify high risk HPV virus on peritoneal cavity. The aim of the study was “Does HPV positivity have any relation with endometriosis clinic?” and “Do the HPV subtypes have any difference on the complaints of endometriosis?”

RESULTS: First Step of Study; There was no correlation with HPV positivity without subtypes and gynecological symptoms. Moreover, each gynecologic complaint was comparably higher with endometrioma presence. Endometrioma positive groups are statistically significantly higher with gynecologic symptoms without HPV positivity. Second Step of Study; “Secondary infertility” is significantly higher in HPV 16-18 group ($p=0,01$) and “dyspareunia” is significantly higher in other HPV positive group ($p=0,007$). Other clinical symptoms of endometriosis have no relation with HPV groups.

CONCLUSION: Endometriosis pathogenesis has many different etiologies from endocrine to infectious and immune disorders. HPV virus may have an association between the presence of sexually transmitted pathogens in the lower and upper female genital tract with endometriosis and endometriosis positivity might be an important parameter on clinical approach. Further studies are needed on this hypothesis.

Keywords: Dysmenorrhea, Dyspareunia, Endometrioma, Endometriosis, HPV, Infertility

Age Distribution-HPV Presence



Clinical Findings of Endometriosis

Variables	Distribution n=410
Endometrioma presence, n (%)	
No	369(90)
Yes	41 (10)
Dyspareunia Presence, n (%)	
No	380 (92,7)
Yes	30 (7,3)
Chronic pelvic pain presence, n (%)	
No	345 (84,2)
Yes	65 (15,8)
Dysmenorrhea Presence, n (%)	
No	333 (81,3)
Yes	77 (18,7)
Infertility presence subtype, n (%)	
No	363 (88,6)
Primary Infertility	42 (10,2)
Secondary Infertility	5 (1,2)
Infertility Duration (n=50)	
mean±sd	2,3±1,3
M (min-max)	2,0 (0,7-6,0)

Table2: Clinical findings of endometriosis

Clinical Findings of Endometriosis- Gynecologic Symptoms of Population

First Step Of Study

	Groups								Test Statistics	
	HPV+ / E- n=179		HPV+ / E+ n=23		HPV- / E+ n=14		HPV- / E- n=194			
	n	%	n	%	n	%	n	%	χ^2/H	p
Dyspareunia Presence										
No	165	92.2	17	73.9	12	85.7	186	95.9	13.1	0.003
Yes	14 ^a	7.8	6 ^a	26.1	2 ^{ab}	14.3	8 ^a	4.1	52	
Chronic pelvic pain presence										
No	160	89.4	8	34.8	6	42.9	171	88.1	47.9	<0.001
Yes	19 ^a	10.6	15 ^a	65.2	8 ^a	57.1	23 ^a	11.9	33	
Dysmenorrhea Presence										
No	157	87.7	4	17.4	2	14.3	170	87.6	83.8	<0.001
Yes	22 ^a	12.3	19 ^a	82.6	12 ^a	85.7	24 ^a	12.4	87	
Infertility presence subtype										
No	154	86.0	17	73.9	11	78.6	181	93.3	14.1	0.017
Primary	21 ^{ab}	11.8	6 ^a	26.1	3 ^{ab}	21.4	12 ^a	6.2	38	
Secondary	4	2.2	0	0.0	0	0.0	1	0.5		
Infertility Duration (n=50)										
M(IQR)	1.5 (1.0)		1.8 (5.3)		2.0 (0.0)		2.0 (2.0)		4.926	0.177

M: Median, IQR: Interquartile range, χ^2 : Fisher exact test, H: Kruskal-Wallis H test, a, b and c shows the difference of the groups. The groups who had a different letter are statistically significant.

Table 3. Statistical analysis of HPV/Endometrioma groups and endometriosis related gynecological complaints

First step of study, HPV positivity and endometrioma presence were together compared with clinical symptoms of endometriosis because endometrioma may cause other gynecological symptoms.

Patient Groups of Study

Variables	Distribution n=410
Age, (years)	
mean±sd	36,3±6,3
M (min-max)	36,0 (20,0-53,0)
20-30	34 (8,3)
30-40	248 (60,4)
40-50	121 (29,5)
50+	7 (1,8)
HPV, n (%)	
Negative	208 (50,8)
Positive	202 (49,2)
HPV Risk, n (%)	
Low Risk (Other HPV)	149 (36,3)
High Risk (HPV 16-18)	53 (12,9)
HPV Negative- No Risk	208 (50,8)
Groups, n (%)	
HPV+ / Endometrioma -	179 (41,9)
HPV+ / Endometrioma +	23 (5,4)
HPV- / Endometrioma +	13 (3,3)
HPV- / Endometrioma -	194 (45,4)

sd: Standard deviation, M: Median

(Table 1- Distribution of patients and HPV presence and HPV subtypes are shown)

Second Step of Study

	HPV Risk Groups						Test Statistics	
	Other HPV		HPV 16-18		HPV Negative			
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	χ^2/H	<i>p</i>
Endometrioma presence								
No	132	88,6	44	83,0	193	92,8	5,01	0,081
Yes	17	11,4	9	17,0	15	7,2	7	
Dyspareunia Presence								
No	130	87,2	52	98,1	198	95,2	9,77	0,007
Yes	19 ^a	12,8	1 ^{ab}	1,9	10 ^b	4,8	2	
Chronic pelvic pain presence								
No	128	85,9	40	75,5	177	85,1	3,34	0,191
Yes	21	14,1	13	24,5	31	14,9	8	
Dysmenorrhea Presence								
No	120	80,5	41	77,4	172	82,7	0,96	0,635
Yes	29	19,5	12	22,6	36	17,3	6	
Infertility presence subtype								
No	130	87,2	41	77,4	192	92,3	12,3	0,010
Primary	18	12,1	9	17,0	15	7,2	98	
Secondary	1 ^{ab}	0,7	3 ^a	5,6	1 ^b	0,5		
Infertility Duration (<i>n</i>=50)								
<i>M(IQR)</i>	1,5 (2,0)		2,0 (1,0)		2,0 (1,5)		4,65	0,098

M: Median, IQR: Interquartile range, χ^2 : Fisher exact test, H: Kruskal-Wallis H test, a, b and c shows the difference of the groups. The groups who had a different letter are statistically significant.

(Table 4. Statistical analysis of HPV subtypes and endometriosis related gynecological complaints.)

Second step of study, HPV and endometriosis symptoms were analyzed according to the HPV subtypes. HPV 16-18 and other HPV types were the main groups to compare gynecologic symptoms of endometriosis separately

SS-050 [Jinekoloji Genel]

The most serious and rare complication of mature cystic teratoma: anti-N-methyl-D-aspartate receptor encephalitisTuğba Akçaoğlu¹, Hatice Kübra Arslan¹, İrem Özöver Çelik², Bahar Müezzinoğlu², Ebru Erbayat³, Mehmet Şeker⁴, Volkan Ülker¹¹Department of Obstetrics & Gynecology, Istanbul Medipol University, Istanbul, Turkey²Department of Pathology, Istanbul Medipol University, Istanbul, Turkey³Department of Neurology, Istanbul Medipol University, Istanbul, Turkey⁴Department of Radiology, Istanbul Medipol University, Istanbul, Turkey

Anti-N-Methyl-Aspartate-Receptor (NMDAR) encephalitis is a paraneoplastic autoimmune encephalitis mediated by anti-NMDAR antibodies primarily seen in children and young adults. Patients often present with neurological and psychiatric symptoms, and initial evaluation is almost always by a neurologist. There are limited studies which describe the link between ectopic expression of NMDAR in the neural tissue found in teratomas to the development of anti-NMDAR encephalitis. As the disease is rare and diagnosis is difficult, a multidisciplinary approach including gynecological evaluation and management is crucial to avoid delay in treatment. We hereby report the first case in Turkey of a 24-year-medical student presenting with this disease.

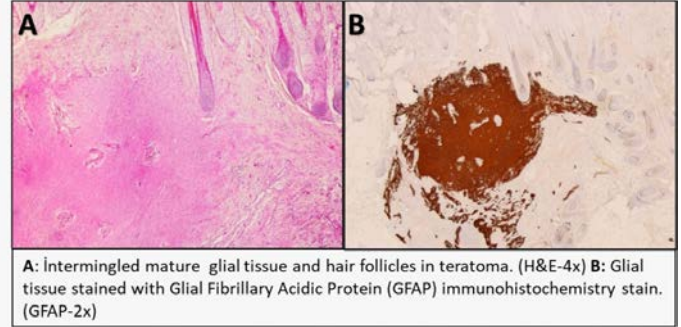
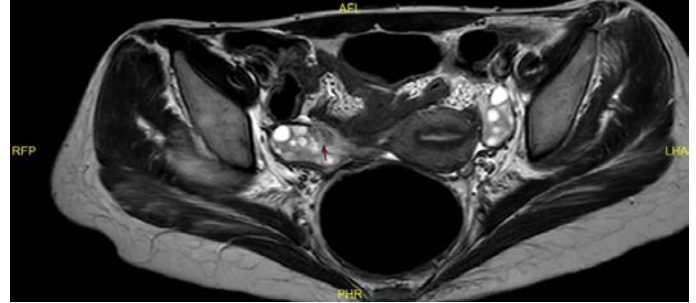
The patient was first admitted to the hospital in Libya after presenting with an acute onset of nausea followed by cognitive disturbances. While MRI was found to be unremarkable for any cranial pathology, the lumbar puncture findings were consistent with viral encephalitis. An EEG taken at the time displayed frontotemporal epileptic foci. Despite 2-weeks of antiviral and antiepileptic treatment the patient's symptoms continued together with the development of focal seizures and intermittent periods of unconsciousness. Seventeen days later she was admitted to our university hospital in a lethargic state where initial management and evaluation by neurology lead to referral to several different departments including infectious diseases, psychiatry, physical therapy and rehabilitation, endocrinology and rheumatology. She was treated with immunoglobulins and antiepileptic drugs until a defective respiratory pattern caused by uncontrolled seizures required intubation and admission to the intensive care unit. The diagnosis was confirmed to be autoimmune encephalitis and the patient received second line immunosuppressive treatment with rituximab.

Following the diagnosis of autoimmune encephalitis, a gynecological evaluation was prompted to exclude a teratoma. Ultrasonography revealed a 10mm hyperechoic lesion in the right ovary. Further investigation with an MRI confirmed a right adnexal lesion measuring around 13mm in diameter to be consistent with an ovarian teratoma. Based on clinical recommendations a laparoscopic right salpingo-oophorectomy was performed in which histopathological evaluation revealed a mature cystic teratoma with glial components. The patient showed gradual clinical improvements in the postoperative period and was discharged after 7 months with full neurological recovery.

Cystic teratomas are common benign ovarian tumors which are easily identified by ultrasonography and should be included in the differential diagnosis of young women with autoimmune encephalitis. The generation of autoantibodies to the NMDAR on neurons in the central nervous system is thought to be triggered by the neuroglia components

of teratomas. If the association is confirmed, surgical removal of the tumor should be considered as early as possible for good clinical outcomes.

Keywords: encephalitis, mature cystic teratoma, salpingo-oophorectomy

Histopathological Specimen Examination**Magnetic Resonance Imaging**

Axial T2A weighted image demonstrates a heterogeneous minimally hyperintense solid lesion (arrow) in the right ovary.

SS-051 [Onkoloji]

Vaginal solitary fibrous tumor, 5 years follow-up without recurrence after excision: a case report and review of literature

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OBJECTIVE: Solitary fibrous tumor (SFT) is a rare spindle cell neoplasm of mesenchymal lineage that was first described as a pleural tumor. SFTs are pathologically characterized by CD 34-positive spindling ovoid cells with variable cellularity and prominent dilated branching vessels resembling hemangiopericytomas. Although most SFTs are benign, biological potential of this tumor is not determined and clinical behavior is hard to anticipate. Female genital tract is an uncommon site for this type of tumor. To the best of our knowledge there are only six cases of vaginal SFT in the literature, with only four

of them presented follow-up information. Here we present a case with vaginal solitary fibrous tumor without recurrence in five years follow-up period following simple excision.

METHODS: Patient Characteristics: A 27-year-old nulliparous woman, was admitted to hospital with a growing vaginal mass in last 6 months before her admission. In physical examination, a pedunculated polypoid mass with dimensions of 7.5x4.5x3.7 cm, originating from posterior vaginal wall, was observed to protrude through introitus. Tumor markers revealed no abnormality. Abdominal ultrasound revealed no significant pathology. Surgical excision was performed. One year after the operation, the patient termly delivered a healthy child with cesarean section. Five years after the operation there was no evidence of recurrence or metastasis.

Pathological Features: Tumor was a well-delineated, gray-pink, firm nodular lesion with a whorled cut surface. Microscopic examination of the tumor revealed predominant hypercellularity with some hypocellular areas. Tumor was composed of spindle cells with bland nuclei and with vessels showing slight perivascular hyalinization (Figure 1a). Tumor cell nuclei had fine chromatin and inconspicuous appearance. There were also a few focal staghorn vessels reminiscent of so-called hemangiopericytoma (Figure 1b). Mitotic figures were sparse; at most one mitotic figure per 10 high power fields were observed. Surgical margins were tumor-free. Immunohistochemical (IHC) examination revealed that tumor cells were strongly positive for CD34 (Figure 1c), vimentin and Bcl2, and found to be negative for cytokeratin AE1/3, CAM 5.2, EMA, SMA, S-100 protein, desmin, and CD99.

DISCUSSION: Differential diagnosis of vaginal SFTs include leiomyoma, neurofibroma, spindle cell epithelioma, and myofibroblastoma. SFTs are classified as tumors with intermediate malignancy and low metastatic potential. Prognosis of vaginal SFTs is not well established due to scarcity of their occurrence and prediction of behavior of this type of tumor is difficult. Although the tumors usually have benign courses, recurrences are reported in the literature (Table 1).

Malignant forms are usually seen in older women (>55 years of age), demonstrate high cellularity, increased mitotic activity (>4 mitosis in 10 high power field), nuclear pleomorphism, necrosis and larger tumor size (>5 cm). Margin infiltration is also predictive for recurrence or metastasis.

CONCLUSION: Diagnosis of SFT should be kept in mind in solid vaginal masses. Tumors composed of spindle cells warrant intricate pathological examination considering SFTs. These cases should be followed up closely after the initial operation for a long period since the outcome may not be predictable.

Keywords: solitary fibrous tumor, vagina, follow-up

Figure 1

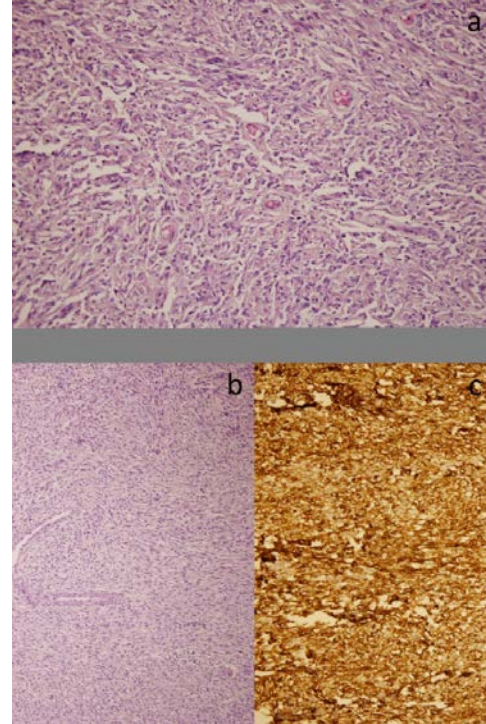


Figure 1. a) Spindle cell tumor with bland nuclei and with vessels showing slight perivascular hyalinization ($\times 200$ Hematoxylin-Eosin) b) Focal staghorn vessels ($\times 200$ Hematoxylin-Eosin) c) Diffuse staining of the cells with CD 34 ($\times 200$)

Table 1

Case	Age	IHC(+) markers	IHC (-) markers	Mitotic index	Ki-67 Proliferation index	Follow-up
Akiyama Y et al. (2000)	34	CD 34, Vimentin, bcl-2	EMA, Cytokeratin, S100, NSE, SMA, CD68	<1/50 HPF	< 1%	-
Vadmal MS et al. (2000)	66	CD 34, bcl-2, CD 99	SMA, MSA, S10011	Not available	-	-
Iyengar P et al. (2007)	52	CD 34, Vimentin, bcl-2, ER, PR	CD99, SMA, MSA, S100, GFAP, EMA, Myoglobin, Low-molecular weight keratin	Undetectable	-	Two local recurrences after first excision (10months-29 months after excision)
Placide N et al. (2012)	48	CD34, bcl-2	Cytokeratin, AE1/3, CAM 5.2, EMA, SMA, S-100, Desmin, CD 99	Not available	-	Free of disease 6 years after the excision
Zou Z et al. (2018)	59	CD34, Bcl-2, CD10	Actin, Desmin, CD 117, DOG-1, H-Caldesmon	Not available	About 20%	Local recurrence 10th month after excision
Reyhan A et al. (2018)	21	CD 34, Vimentin, bcl-2	EMA, SMA, HMB-45, CD 99	Up to 4 / HPF	8%	Local recurrence 4 years after excision
Present case	27	CD34, Bcl-2	Cytokeratin AE1/3, CAM 5.2, EMA, SMA, S-100 protein, desmin, CD99	$\leq 1/10$ HPF	Not available	Free of disease 5 years after the excision

Table 1. Review of vaginal SFT cases in literature. (IHC: immunohistochemistry, HPF: high-power field)

SS-052 [Onkoloji]

Factors that predicated rupture in clinically early stage ovarian tumors

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OBJECTIVE: To determine the factors that predict capsule rupture in clinically early stage malignant ovarian neoplasms and to increase survival by preventing the poor progression caused by rupture. **METHODS:** A total of 57 malignant ovarian tumor patients who were evaluated as preoperative early stage who underwent surgical treatment at Ondokuz Mayıs University Faculty of Medicine Hospital between the dates of September 2016 and September 2021 in this single-center retrospective study, predictive factors for capsule rupture after surgical staging were investigated. Statistical evaluations were performed using univariate and multivariate methods. The SPSS (Statistical Package for the Social Sciences) program was used for the statistical analysis of the quantitative data obtained from the study. **RESULTS:** During the study period, 126 women were operated for malignant ovarian tumors. 57 patients met the inclusion criteria. Thirty (52.6%) of the 57 patients had ovarian capsule rupture and twenty-seven (47.4%) patients had capsule surface contact. It was observed that the risk of capsule rupture was higher in patients whose histology was found to be epithelial carcinoma in univariate analysis ($p=0.318$) compared to non-epithelial tumors; however, this difference was found to be statistically higher than the significance level. Capsule rupture was much lower in the absence of LVSI ($p=0.005$) and in low-grade tumors Grade 1 ($p=0.002$). Lack of the LVSI as a result of multivariate analysis [odds ratio (OR), 4.69; 95% confidence interval (CI), 1.20-13.80; $p=0.026$] and extent of tumor grade I [odds ratio (OR), 10.5; 95% confidence interval (CI), 1.08-101.66; $p=0.042$] in patients with ovarian malignancies were found as the independent variables at the point of reducing the risk of capsule rupture. **CONCLUSION:** The presence of LVSI and the fact that the tumor grade is Grade 2-3 were factors that predict the risk of capsule rupture. Therefore, they were considered to cause a poor prognosis and reduce survival.

Keywords: Ovarian cancer, Ovarian capsule, Capsule rupture, Predictive factors

Univariate and multivariate analysis in patients with ovarian carcinoma with capsule rupture

	Ruptured cases	Univariate analyses, p	Multivariate analyses OR CI 95% p
Age (years)	12/25 (%48.0)		
≤50	18/32 (%56.3)	0.599	
>50			
BMI	4/9 (%44.4)		
<25	26/48 (%54.2)	0.592	
≥25			
Histology	26/46 (%56.5)		
Epithelial	4/11 (%36.4)	0.318	
Non – epithelial			
Omental Involvement	29/56 (%51.8)		
Absent	1/1 (%100.0)	0.339	
Present			
LVSI	14/37 (%37.8)		
Absent	16/20 (%80.0)	0.005	4.69 1.20-13.80 0.026
Present			
Grade	1/11 (%9.1)		
1	29/46 (63.0)	0.002	10.50 1.08- 101.66 0.042
2-3			
Tm diameter	14/25 (%56.0)		
<12 cm	16/32 (%50.0)	0.790	
≥12 cm			
Cytology	22/46 (%47.8)		
Negative	8/11 (%72.7)	0.186	
Positive			
Presence of tumors in the ovary	23/44 (%52.3)		
Unilateral	7/13 (%53.8)	0.999	
Bilateral			
CA125	11/28 (%39.3)		
<115.5 cm	19/29 (%65.5)	0.065	
≥115.5 cm			

SS-053 [Onkoloji]

Survival effect of chemotherapy dose modification and/or colony stimulating factor use in maximal cytoreductive surgery for advanced stage epithelial ovarian/tuba/ peritoneum cancers

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AIM: Due to chemotherapy toxicity, chemotherapy dose reductions/delays were observed during standard adjuvant chemotherapy in patients who underwent surgery and were diagnosed with advanced epithelial ovarian/tubal/peritoneal cancer after surgery in the Etlik Zübeyde Hanım Gynecological Oncology Surgery Clinic. We will retrospectively examine survival effect of chemotherapy dose modification (dose reductions and delays) and using granulocyte colony stimulating factor. We plan to contribute to the literature with the results we have obtained. **MATERIALS-METHODS:** The patients whose diagnosis of FIGO stage III-IV epithelial ovarian/tuba/peritoneal cancer was confirmed between 01.01.2003-31.12.2020 were included in the study. Patients who underwent maximal cytoreduction and all patients who were given a combination of carboplatin (AUC 6) + paclitaxel (175 mg/m2)

as a chemotherapy protocol were included. Those who received neo-adjuvant chemotherapy, patients who could not complete chemotherapy for reasons other than toxicity, patients with non-epithelial histological type and early stage ovarian cancer, those who had surgery and follow-up outside our hospital, patients with synchronous and/or metastatic tumors, patients with hematological comorbidity, any inflammatory Patients with symptoms or conditions were excluded from the study. Our study is a retrospective case-controlled cohort study. RESULTS: 209 female patients between the ages of 23-77 who underwent surgery and chemotherapy treatment in our hospital were included. During the follow-up period, 95 (45,5%) of 209 patients died. The median survival time was 108 months, and the five-year survival rate was 69,9%. FIGO stage was identified as the most significant prognostic factor. Significant 4,4-times higher death risk in patients who have Stage 4 disease compared with patients who have Stage 3 disease (95% CI: 2,16-9,05, $p<0,001$). There was no significant difference in survival between dose modification in chemotherapy due to toxicity ($p=0,492$). The relationship between the use of granulocyte colony-stimulating factor and survival to avoid dose modification during chemotherapy was found to be statistically insignificant ($p=0,998$). Grade 3-4 hematological toxicity which was evaluated as a statistically significant predictor in univariate analyzes, was not evaluated as a statistically significant factor in multivariate analyzes ($p=0,159$). Patients with a BMI greater than 29 kg/m² were associated with a 1.67 times (95% CI: 1.058-2.652) increased risk of death ($p=0,028$). Carboplatin was associated with a 1.86-fold (95% CI: 1.13-3.04) increased risk of death in patients given a dose of less than 725 mg ($p=0,013$). Those who started chemotherapy less than 15 days after surgery had a 1.8 times (95% CI: 1.16-2.85) increased risk of death ($p=0,008$). DISCUSSION: FIGO stage was defined as the most significant prognostic factor in epithelial ovarian cancer patients. The relationship between dose modification in chemotherapy due to toxicity and the use of granulocyte colony-stimulating factor to avoid dose modification during chemotherapy with overall survival was found to be statistically insignificant. It was found that giving the carboplatin dose below 725 mg, a BMI of more than 29 kg/m², and the time between operation and chemotherapy less than 15 days increased the risk of death statistically. Confirmation of existing findings will only be possible by compiling existing studies and conducting new studies in large patient groups.

Keywords: Advanced Stage Epithelial Ovarian Cancer, Chemotherapy Dose Modification, Chemotherapy Dose Reductions And Delays, Granulocyte colony-stimulated factor (G-CSF)

Multivariant Analiz

	Hazard Ratio	%95 Güven Aralığı	p değeri
Evre 3 vs. Evre 4 (Referans: Evre 3)	4.422	2.160-9.052	<0.001
Premenopoz vs. Postmenopoz (Referans: Premenopoz)	1.116	0.726-1.716	0.618
Karboplatin Dozu <725 mg vs ≥725 mg (Referans: Karboplatin ≥725 mg)	1.863	1.138-3.048	0.013
Vücut Kitle İndeksi ≤29 kg/m ² vs >29 kg/m ² (Referans: Vücut Kitle İndeksi ≤29kg/m ²)	1.675	1.058-2.652	0.028
Grade 3-4 Hematolojik Toksitesi Var vs. Yok (Referans: Grade 3-4 Hematolojik Toksikite Yok)	1.443	0.866-2.406	0.159
GIS Toksikitesi Var vs. Yok (Referans: GIS Toksitesitesi Yok)	1.230	0.698-2.165	0.474
Dermatolojik Toksikite Var vs. Yok (Referans: Dermatolojik Toksikite Yok)	1.050	0.596-1.850	0.867
Üriner Toksikite Var vs. Yok (Referans: Üriner Toksitesite Yok)	1.348	0.843-2.155	0.212
Operasyon-KT Başlangıcı Arası Süre ≤15 gün vs.>15 gün (Referans:>15 gün)	1.825	1.166-2.856	0.008
Doz Azaltımı Oldu vs. Olmadı (Referans: Doz azaltımı olmadı)	1.341	0.798-2.251	0.268
GM-CSF Kullanıldı vs Kullanılmadı (Referans: GM-CSF Kullanılmadı)	1.001	0.549-1.823	0.998

SS-054 [Onkoloji]

Investigation of genetic analysis results from peripheral blood samples of cases diagnosed with Endometrial Cancer

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OBJECTIVE: Endometrial cancer is the most common gynecological cancer in developed countries. In Turkey, approximately 3850 new cases are reported annually and approximately 520 deaths are observed. Most patients diagnosed with endometrial cancer are postmenopausal, with a median age of 60 at diagnosis. However, the current classification system can be improved through the inclusion of molecular determinants. In 2013, The Cancer Genome Atlas (TCGA) Research

Network reported a comprehensive and integrated genomic analysis of 373 endometrial cancers. showed that POLE and MSI subgroups were associated with endometrial cancer histological subgroups. In our study, we aimed to analyze the data of the patients whom we had surgery with the diagnosis of endometrial cancer in our clinic, and for whom we requested consultation from the Genetic Diseases Diagnosis Center of our hospital, who considered risky due to their familial or medical history.

METHODS: The data of patients whose endometrial biopsy material was reported and surgery was performed at Etlik Zübeyde Hanım Gynecology Training and Research Hospital between the dates of 2020-2022 were retrospectively analyzed. Patients whose surgery was performed by VK,ÇÇ,CH and who were referred to the Genetic Diseases Diagnosis Center of our hospital, who were deemed risky due to their familial or medical history, were included in the study.

Demographic and clinical data of the included patients were recorded. Genetic analysis, test was performed on genomic DNA isolated from patients 3 cc peripheral blood obtained into EDTA containing tube. Thusgermline mutations (not somatic) were evaluated. Next Generation Sequencing (NGS) was performed on NovaSeq 6000 via Twist custom cancer gene panel kit which includes 59 cancer related genes.

RESULTS: Between the dates of 2020-2022, there were 38 patients whose endometrial biopsy material was reported as endometrial cancer and whose surgery was performed, and genetic analysis was performed from peripheral blood samples by the Genetics unit. Normal karyotype was reported in 17 (44.7%) of 38 patients. In 15 (39.5%) VUS (Variant of uncertain significance) was reported as karyotype without clinical significance. In 6 (15.8%), it was reported as pathological karyotype. (Table 1)

CONCLUSION: In the next few years, it is likely that the etiology and recurrence of endometrial cancer will be understood with the help of molecular models, promising better outcomes for patients with endometrial cancer. We think that our study should be supported by more multicenter and more patient studies.

Keywords: Endometrial cancer, The Cancer Genome Atlas, Genetic analysis, Peripheral blood samples

Table 1. Clinical data of patients with pathological karyotype result from Genetic Analysis

Patient	Age	Histopathology	Grade	Stage	Genetic Mutation
1	57	Endometrioid	2	3C2	VHL
2	44	Mucinous	2	4B	TP53 Mosaic
3	49	Endometrioid	1	2	MSH6/MSH3
4	56	Endometrioid	1	3A	MSH6/POLH
5	58	Endometrioid	2	1A	RAD51C/ATM/ATM/RET
6	62	Endometrioid	1	1A	MUTYH

SS-055 [Onkoloji]

Gynecologic Oncologic Surgery and Reconstruction with Local Flaps; Five-Year Single Center Experience

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INTRODUCTION: Gynecologic cancers continue to be common among women of all socioeconomic backgrounds. Most gynecologic cancer are successfully managed surgically or medically. However, in some cases surgery also includes radical excision. For those patients reconstruction by either local flaps or skin grafts could be required. This retrospective study consists of our single-center experience with patients who required reconstruction with flaps or skin grafts.

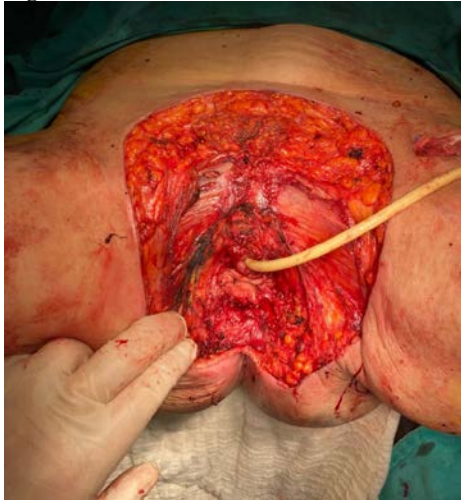
MATERIAL AND METHODS: 22 Patients who underwent gynecologic oncologic surgery requiring local flaps and grafts between April 2018 and April 2022 were retrospectively investigated and included in this study. The type of the gynecologic operation, clinical history, the method of reconstruction, patient demographics, complication and recurrence rates were evaluated.

RESULTS: Vulvectomy was performed in the majority of the patients with 68.1%(15), Pelvic exenteration was performed in 22.7% (5) patients, anterior exenteration in 11.1% (2) patients. The most common malignancy was HPV-Related squamous cell carcinoma, Reconstruction was performed through using fasciocutaneous flap in 86,3% (19) patients, pedicled rectus myocutaneous flap was indicated in 4.5% (1) patient, and skin graft was used in 9.0% (2) patients. Complications occurred in 40.9% (9) patients, which included partial flap necrosis in 4.5% (1) patient, recurrence in 9.0%(2) patients and surgical site infections in 31.8%(7) patients in.

CONCLUSION: Gynecological oncological radical resections are an effective way to treat gynecological malignancies, however reconstructive surgery could be required. The technique of reconstruction should be chosen carefully and a multidisciplinary approach should be used when needed. Patients who underwent vulvectomy are at a higher risk of surgical site complications due to multiple reasons.

Keywords: Gynecologic Oncology, Reconstructive Surgery, Fasciocutaneous Flaps, Vulvectomy, Pelvic Exenteration

Figure 1a



Vulvar Squamous Cell Carcinoma repaired by Bilateral Fasciocutaneous Flap

Figure 1b



Vulvar Squamous Cell Carcinoma, repaired by Bilateral Fasciocutaneous Flap

Figure 2a



Total Pelvic Exenteration + Radical Excision repaired by Unilateral Fasciocutaneous Flap + Primary Repair

Figure 2b



Unilateral Fasciocutaneous Flap + Primary Repair

Results

Age (years)	58.3±16.3 (41-90)
Body mass index (kg/m2)	29.8±4.8(22.1-39.0)
Hypertension	9 (40.9%)
Hypothyroidism	4 (18.1%)
Diabetes	4 (18.1%)
Coronary artery disease	4 (18.1%)
Smoking	4 (18.1%)
Technique of Resection	
Vulvectomy	15 (68.1%)
Anterior Resection	5 (22.7%)
Pelvic exenteration	2 (9.0%)
Technique of Reconstruction	
Bilateral fasciocutaneous flap	15 (68.1%)
Unilateral fasciocutaneous flap	4 (16.7%)
Rectus abdominis myocutaneous flap	1 (4.5%)
Skin grafts	2 (9.0%)
Complications	
Surgical site infection-dehiscence	7 (31.8%)
Partial flap necrosis	1 (4.5%)
Recurrence	2 (9.0%)
Pathology Results	
Squamous cell carcinoma	11 (50.0%)
High-grade squamous intraepithelial lesion	4 (18.1%)
Paget's disease	2 (9.0%)
Malignant melanoma	1 (4.5%)

SS-056 [Onkoloji]

Factor affecting lymph node metastasis in uterine papillary serous carcinomas

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OBJECTIVE: The aim of this study is to investigate the risk factors for lymph node metastasis in patients with uterine serous cancer (USC) who underwent systematic staging surgery.

MATERIALS-METHOD: 80 patients who were operated for pure uterine serous papillary carcinoma between 2008 and 2020 were included in the study. The effects of demographic information and clinicohistopathological characteristics of the included patients on lymph node metastasis were examined.

FINDINGS: The median age of the patients included in the study was 64.3 and the tumor diameter was 3.8 cm. At the time of diagnosis, 65.8% of the cases were in the advanced stage, while 34.2% were in the early stage. There was no LNM in 42 (52.5%) of the cases, only pelvic in 6 (7.5%), only paraaortic LNM in 4 (5%) patients, and both pelvic and paraaortic LNM in 24 (30%) patients. When factors that may affect LNM were evaluated with univariate analysis, myometrial invasion ($p<0.001$), LVSI ($p<0.002$), cervical involvement ($p<0.011$), isthmus involvement ($p<0.036$), adnexal involvement ($p<0.036$) and cytology positivity ($p<0.002$) were significantly associated with lymph node involvement ($p<0.05$); LVSI ($p<0.005$; [HR]: 0.032 95% [CI]: 0.003-0.354) and cytology positivity ($p<0.007$; [HR]: 0.094 95% [CI]: 0.017-0.518) in multivariate analysis for lymph node metastasis was found to be independent risk factors ($p<0.05$).

CONCLUSION: Most patients with uterine papillary serous carcinoma are diagnosed at an advanced stage. Lymph node metastasis is seen in 47.5% of these diagnosed cases. LVSI and peritoneal cytology positivity are two important prognostic factors for lymph node metastasis.

Keywords: Endometrial carcinoma, uterine papillary serous carcinoma, lymph node metastasis

TABLE 1: CLINICOHISTOPATHOLOGICAL FEATURES OF PATIENTS

TABLE 1: CLINICOHISTOPATHOLOGICAL FEATURES OF PATIENTS	n (%)
Age	
Median (range)	64,3 (53-76)
Parity	
Nulliparity	8 (10%)
Multiparity	72 (90%)
Menopause	
Premenopausal	13 (10.9%)
Postmenopausal	106 (89.1%)
Symptom	
Asymptomatic	7 (8,8%)
Abdominal distention	6 (7,5%)
Postmenopausal bleeding	57 (71,3%)
Pain	4 (5%)
Menometrorrhagia	6 (7,5%)
Tumor size	3,8 (0,6-8)
Median CA-125 (range) (U/ml)	10,8 (3,4-4992)
Median CA-15-3 (range) (U/ml)	16,2 (6,7-272)
Median CA-19-9 (range) (U/ml)	7,2 (1,2-128)
Median CEA (range) (U/ml)	0,7 (0,5-7,8)
FIGO stage (2009)	
I	24 (30,1%)
IA	17
IB	7
II	4(5%)
III	24(30.1%)
IIIA	3
IIIB	1
IIIC1	4
IIIC2	16
IV	28 (35%)
IVA	2
IVB	26

TABLE 2: HISTOPATHOLOGICAL FEATURES

TABLE 2: HISTOPATHOLOGICAL FEATURES	n (%)
Myometrial invasion	
<1/2	33 (41,3%)
≥1/2	47 (58,7%)
Cervical stromal involvement	
No	55 (68,8%)
Yes	25 (31,2%)
Orbital involvement	
No	58 (65%)
Yes	22 (35%)
Isthmus involvement	
No	52 (65%)
Yes	28 (35%)
Lymphovascular space invasion	
No	22 (27,5%)
Yes	52 (35%)
Not reported	6 (7,5%)
Peritoneal cytology	
No	45 (56,3%)
Yes	33 (41,3%)
Not reported	2 (2,5%)
Adnexal involvement	
Unilateral	10 (12,5%)
Bilateral	17 (21,3%)
No	52 (65%)
Not reported	1 (1,3%)
Lymph node removed	
Median (range)	36 (26-76)
Pelvic	25 (19-54)
Para-aortic	10 (2-32)
Lymph node metastasis	
No	42 (52,5%)
Yes	34 (42,5%)
PLN (+) PALN (-)	6 (7,5%)
PLN (+) PALN (+)	24 (30%)
PLN (-) PALN (+)	4 (5%)
Not reported	4 (5%)

PLN: pelvic lymph node; PALN: para-aortic lymph node.

TABLE 3: FACTORS AFFECTING LYMPH NODE METASTASIS

	Patient	Univariate analysis	Multivariate Analysis HR	CI %95	P value
Age		0.608			
<60	9/18				
≥60	25/58				
Ca 125		0.283			
<35	15/35				
≥35	10/17				
Tumor size		0.105			
<2 cm	4/16				
≥2 cm	28/58				
Myometrial invasion		0.001	0.71	0.131-3.850	0.691
<50	7/32				
≥50	27/44				
LVI		0.002	0.032	0.003-0.354	0.005
No	1/21				
Yes	29/49				
Peritoneal cytology		0.002	0.094	0.017-0.518	0.007
Negative	12/43				
Positive	21/32				
Cervical involvement		0.011	0.694	0.149-3.224	0.641
No	18/52				
Yes	16/24				
Isthmus involvement		0.036	0.203	0.032-1.292	0.091
No	18/50				
Yes	16/26				
Omental involvement		0.182			
No	22/55				
Yes	12/21				
Adnexal involvement		0.036	2.031	0.349-11.803	0.43
No	18/50				
Yes	16/26				

SS-057 [Onkoloji]

The effect of colorectal resection as part of cytoreductive surgery for patients with ovarian cancer, tertiary center experience

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Objective. Epithelial ovarian cancers (EOC) constitute 95% of ovarian cancers and 60% of EOC patients are diagnosed at advanced stage. The most important factor of survival is applied maximum effort during surgery (reducing the amount of residual tumor to zero). Therefore, surgery often includes radical procedures such as colorectal resection, diaphragm stripping, splenectomy, and liver resection. The aim of this study was to evaluate the effect of colorectal resection accompanying surgical cytoreduction on perioperative complication rates, the risk factors and rates of anastomotic leakage (AL) and survival following in ovarian cancer patients.

Methods. The data of all patients in the Department of Gynecologic oncology at Etlik zübeyde hanım training and research hospital between January 2006 and January 2021, who were diagnosed with EOC whose surgical procedure and postoperative care were provided in our hospital, were scanned retrospectively. Demographic characteristics of patients, FIGO stage, preoperative hemoglobin/albumin/Ca125 value, presence of blood transfusion during/after operation, recurrence rate, and overall survival times will be determined by examining patient files and hospital database. The data were analyzed by descriptive statistical methods.

Results. Resection was performed in 99 (31.2%) of 312 advanced stage patients. Post-resection anastomosis of the patients were performed with staples, there was no manual anastomosis. AL occurred in 12 (12.1%) patients who underwent resection. AL had no significant effect on survival (HR: 0.930 (0.434-1.990), $p=0.851$). There was no significant relationship between the development of AL and age (OR: 1.016 (0.958-1.079), $p=0.592$), body mass index (OR: 1.027 (0.921-1.145), $p=0.627$), the presence of comorbidity (OR: 1.583 (0.463-5.412), $p=0.464$), preoperative hemoglobin level (OR: 0.988 (0.835-1.1170), $P=0.892$), blood transfusion (OR: 0.946 (0.257-3.488), $p=0.934$), preoperative Ca125 level (OR: 1.00, $p=0.938$), small bowel resection with colorectal resection (OR: 4.400 (0.874-22.161), $p=0.072$), prophylactic colostomy (OR: 0.262 (0.039-1.780), $p=0.171$).

There was a significant correlation between the preoperative low Albumin level and the development of AL (OR: 0.448 (0.238-0.841), $p=0.013$).

The one-year recurrence rate was 16.9%, and the five-year recurrence rate was 70.2% in those who underwent resection. The five-year recurrence rate was 66.7% in those with AL and 82.5% in those without AL ($p=0.268$). The one-year recurrence rate was 30.0% in those with AL and 23.3% in those without AL ($p=0.642$). There was no significant difference in the recurrence rate of those with and without AL. In advanced stage patients, 1-year survival rate was 92.6% and 5-year survival rate was 43.1%. The one-year survival rate was 90.9% in those who underwent colorectal resection and 93.4% in those who did not ($p=0.428$). The five-year survival rate was 32.2 in those who underwent colorectal resection and 48.6% in those who did not ($p=0.012$). The one-year survival rate was 90.8% in those who had resection and did not have a leak, and 91.7% in those with a leak ($p=0.922$). Five-year survival rate was 28.9% in those without leakage, and 54.5% in those with leak ($p=0.089$). AL had no significant effect on five-year survival ($p=0.372$).

Conclusions. Our study showed that the morbidity and mortality rate of colorectal resection are acceptable. The preoperative low albumin value of these patients may increase the risk of anastomosis leakage. Further study of the relationship between preoperative albumin level and anastomotic leakage may help reduce this complication.

Keywords: Anastomotic leakage, colorectal resection, ovarian cancer, risk factors.

SS-058 [Jinekoloji Genel]

Examination of the association of symptoms and hormonal values in patients with polycystic ovary syndrome

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OBJECTIVES: PCOS (polycystic ovary syndrome) is one of

the most common endocrinological disorders in women of reproductive age. In these patients, thyroid dysfunctions and prolactin hormone disorders often accompany. Additional hormonal evaluation is necessary in order to diagnose these diseases, which may show similar symptoms in terms of symptoms. Our aim in this study is to evaluate the effect of hormonal values of patients with PCOS on the symptoms of the disease.

METHODS: 57 patients with PCOS aged 18-40 years diagnosed according to the Rotterdam criteria were included in the study. The patients were divided into two groups according to their symptoms as oligomenorrhea and amenorrhea. Thyroid Stimulating Hormone (TSH), Thyroxine (T4), Estradiol (E2) and Prolactin values were compared in both groups. The presence of hyperandrogenemia symptoms in these patients was also included in the evaluation.

RESULTS: Of the 57 patients with PCOS included in the study, 87.7% (n=50) were amenorrhoeic, 7 of them 12.3% (n=7) were oligomenorrhoeic. Age (mean) 27.7 ± 6.1 SD (18-40), BMI (mean) 26.4 ± 6.7 SD (16.6-45.8), Parity (median) 0 ± 1 IQR (0-4). While 49.1% (n=28) of these 57 patients had hyperandrogenemia, 50.9% (n=29) did not have hyperandrogenemia. Both groups were compared and no significant difference was found between the values of TSH (p=0.410), FT4 (p= 0.913), Estradiol (p= 0.610), Prolactin (p= 0.715).

CONCLUSION: Presence of PCOS symptoms is one of the diagnostic criteria and may be affected by hormonal factors in some patients. Especially thyroid hormones and prolactin hormone disorders are often accompanied. In our study, no correlation was found between symptoms and hormonal values that are not used in the diagnosis of PCOS.

Keywords: polycystic ovary syndrome, oligomenorrhea, amenorrhea, hormonal values

SS-059 [Jinekoloji Genel]

Using AMH to detect the difference in granulosa cell physiology of ovaries with peripheral follicular configuration and multifollicular configuration in women with polycystic ovary syndrome

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OBJECTIVE: The aim of this study; to evaluate the distribution of follicles in the ovaries of women with polycystic ovary syndrome ultrasonographically and to detect the different granulosa cell physiology of ovaries with peripheral follicular configuration and multifollicular configuration by means of AMH.

METHOD: It is a prospective cross-sectional study. The cases were selected among the patients who applied to the general gynecology and PCOS outpatient clinics of Bursa Uludağ University, Department of Obstetrics and Gynecology between February 2019 and October 2020.

The patients were divided into two groups: the PCOS group (PCOP) with a peripheral configuration ultrasonographically and the PCOS group (MF) with a multifollicular configuration ultrasonographically. A total of 273 cases were included in the study, 226 cases in the PCOP group and 47 cases in the MF group. Serum FSH, LH and Estradiol levels were studied on the 3rd day of the cycle and serum progesterone levels were studied on the 21st day of the cycle. Independent of the cycle day; AMH, PRL, Total Testosterone, Free Testosterone, 17-OH-PRG, Androstenedione, HbA1c and TSH, PRL and fasting blood glucose were studied. Age, AFC, BMI, ovarian volumes and mFG scores were recorded. Statistical analyzes were performed using the IBM SPSS 23.0 program.

RESULT(S): When the AMH levels of the two groups included in the study were compared, a significant difference was found between them (p=0.06). There was a significant difference in age, total testosterone, free testosterone, DHEAS and 17-OH-PRG, 21st day progesterone, fasting blood sugar values and ovarian volumes of both groups (p<0.001 / p=0.006 / p=0.013 / p=.0003 / p=0.001 / p=0.006 / p=.000 / p=.000).

CONCLUSION(S): In this study, it was aimed to ultrasonographically evaluate women with a diagnosis of Polycystic Ovary Syndrome and to determine the granulosa cell physiology of ovaries with peripheral follicular configuration and multifollicular configuration by means of AMH, and a significant relationship was determined according to the data obtained. Age value was significantly lower in the PCOP morphology group than in the MF morphology group. Since the primary objective of the study was to evaluate the granulosa cell physiology of the ovaries in PCOP morphology and MF morphology, the resulting result creates confusion as to whether the current significant difference is due to physiological difference or age gain. There is still a lot of information to be gained to fully understand the pathophysiological role played by granulosa cells and thus AMH in PCOS.

Keywords: AMH, PCOS, USG

TABLE - 1

	PCO	MF	P
AGE	25,9 ± 4,9	30,0 ± 5,0	,000*
AMH	6,71(4,5-9,5)	5,5(3,2-6,9)	0,08*
BMI	23,7 ± 4,8	22,9 ± 4,6	0,42
FG	7,5(6-10)	7,1(6-8)	0,23
FSH	4,6(3,6-4,7)	4,2(3,1-4,6)	0,57
LH	6,4(3,8-8,3)	6,4(3,5-9,0)	0,49
T.TES	0,56(0,4-0,59)	0,49(0,4-0,58)	0,92
F.TES	2,1(1,2-3)	1,4(0,87-1,8)	0,02*
DHEAS	361 ± 142	302 ± 106	0,17
ANDROSTENEDION	3,2 ± 1,4	2,6 ± 1,06	0,043*
17-OH-PRG	2,02(1,02-2,1)	1,43(0,8-1,2)	0,016*
E2	62(36-65)	58(41-61)	0,39
PRG	1,2(0,2-0,5)	0,4(0,15-0,6)	0,7
TSH	1,9(1,3-2,4)	2,7(1,4-2,9)	0,22
PRL	12,9(8,6-15,2)	13,0(9,4-15,9)	0,48
HbA1c	5,24(4-6,9)	5,13(4,1-6,5)	0,14
FASTING BLOOD SUGAR	92,4(57-158)	79,7(63-99)	,000*
RIGHT OVARY	11,6(6,5-16)	9,39(6,5-13)	,000*
LEFT OVARY	11,3(6,5-16)	9,57(7-13)	,000*

Table - 1: Comparison of Values of All Groups

SS-060 [İnfertilite]

Determining The Age Group Based Cut-Off Values of Serum Anti-Mullerian Hormone Concentrations to Diagnose Polycystic Ovary Syndrome

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OBJECTIVE: Our study aims to determine cut-off values of serum AMH (anti-Mullerian hormone) concentration for different age groups (21-25, 26-30, 31-35 years of age) in order to diagnose PCOS.

MATERIALS-METHODS: 187 women aged between 21 and 35 years were enrolled into this descriptive study. Patients diagnosed with PCOS (Polycystic Ovary Syndrome) according to the Rotterdam Criteria formed the PCOS group (n=93), patients without symptoms related to PCOS formed the control group (n=94). Follicular phase serum hormone concentrations were evaluated during the endocrinological assessment of patients with PCOS. Serum estradiol, FSH (follicle stimulating hormone), LH (luteinizing hormone), PRL (prolactin), TSH (thyroid stimulating hormone), total testosterone, DHEAS (dehydroepiandrosterone sulfate), SHBG (sex hormone binding globulin), androstenedione and AMH concentrations were measured. Cut-off values of serum AMH concentrations for age groups (21 - 25; 26 - 30 and 31 - 35) were measured using ROC curve analysis. Other parameters were also compared.

FINDINGS: The prevalence of frank, ovulatory, normoandrogenic, and non-PCO PCOS was 69.9%, 10.8%, 10.8% and 8.6%, respectively. Serum AMH concentrations greater than 5.56 ng/mL was associated with PCOS for the patients between 21 and 25 years of age (sensitivity 80.65%; specificity 75.00%; positive predictive value [PPV] 75.36%; negative predictive value [NPV] 80.00%). The cut-off value was 4.01 ng/mL for the patients between 26 and 30 (sensitivity 74.19%; specificity 70.07%; PPV 71.88%; NPV 73.33%), while it was 3.42 ng/mL for the oldest age group (31-35) (sensitivity 74.19; specificity 83.87; PPV 82.14; NPV 76.47%). The correlation between antral follicle count and serum AMH was strong for each age group.

CONCLUSIONS: Serum AMH concentration is a valuable parameter for assessing of patients with symptoms indicating PCOS. We recommend measurement of serum AMH to support the diagnosis or to be used instead of AFC (antral follicle count) for Rotterdam criteria. Further research will clarify its potential as a diagnostic criterion.

Keywords: Anti-Mullerian Hormone, Hyperandrogenism, Polycystic Ovarian Morphology, Polycystic Ovary Syndrome

Table 1: Distribution of the number of patients according to PCOS phenotypes

Phenotypes	Age 21 – 25	Age 26 – 30	Age 31 – 35	Total	Share (%)
All Three Criteria	25	22	18	65	69.9
Oligo/Anovulation + Hyperandrogenism	3	2	3	8	8.6
PCOM + Hyperandrogenism	0	2	8	10	10.8
PCOM + Oligo/Anovulation	3	5	2	10	10.8
Total	31	31	31	93	100

Table 2: The comparison between patients with PCOS and the control group for the ages between 21 and 25. Significance was considered as p<0.05

	PCOS (n=31)	Controls (n=32)	p
Age [median (min. – max.)]	23 (21 – 25)	23 (21 – 25)	0,905*
Height (m) (mean ± SD)	1,63 ± 0,56	1,64 ± 0,47	0,135**
Weight (kg) [median (min. – max.)]	64 (45 – 103)	56 (45 – 93)	0,011*
BMI (kg/m ²) (mean ± SD)	24,09 ± 3,90	21,48 ± 3,62	0,008**
Ferriman-Gallwey Score [median (min. – max.)]	10 (4 – 20)	6,50 (4 – 14)	0,02*
Total Antral Follicle Count [median (min. – max.)]	26 (13 – 34)	16 (1 – 27)	<0,001*
SHBG (nmol/L) (mean ± SD)	47,92 ± 21,31	54,6 ± 19,2	0,202**
Total Testosterone (ng/mL) (mean ± SD)	30,92 ± 10,2	29,99 ± 9,43	0,71**
DHEAS (mcg/dL) [median (min. – max.)]	273,00 (135,82 – 681,36)	241,43 (59,40 – 566,95)	0,153*
Androstenedione (ng/mL) [median (min. – max.)]	3,00 (1,17 – 7,68)	2,69 (0,81 – 9,78)	0,165*
FSH (mIU/L) [median (min. – max.)]	6,30 (2,61 – 11,16)	6,80 (1,66 – 55,50)	0,299*
LH (mIU/L) [median (min. – max.)]	7,18 (2,41 – 18,96)	4,65 (0,19 – 36,03)	0,01*
Estradiol (pg/mL) [median (min. – max.)]	46,41 (25,49 – 145,66)	49,86 (19,71 – 322,84)	0,357*
TSH (mIU/L) (mean ± SD)	2,03 ± 1,05	1,57 ± 0,69	0,052**
Prolactin (mg/mL) [median (min. – max.)]	10,88 (4,22 – 28,00)	12,29 (4,93 – 28,23)	0,26*
AMH (ng/mL) (mean ± SD)	8,38 ± 3,45	4,28 ± 2,41	<0,001**

*: Comparing the minimum – maximum values of non-normal distributed data with the Mann Whitney U test. **: Comparing the mean and standard deviation values of normal distributed data with t-test.

Table 3: The comparison between patients with PCOS and the control group for the ages between 26 and 30. Significance was considered as $p < 0.05$

	PCOS (n=31)	Controls (n=31)	p
Age [median (min. – max.)]	27 (26 – 30)	27 (26 – 30)	0,253*
Height (m) [median (min. – max.)]	1,64 (1,50 – 1,76)	1,64 (1,50 – 1,74)	0,848*
Weight (kg) (mean \pm SD)	76,28 \pm 18,24	62,32 \pm 10,45	<0,001**
BMI (kg/m ²) (mean \pm SD)	28,47 \pm 7,43	23,25 \pm 3,89	0,001**
Ferriman-Gallwey Score [median (min. – max.)]	10 (6 – 28)	8 (4 – 18)	0,047*
Total Antral Follicle Count [median (min. – max.)]	26 (12 – 38)	13 (5 – 24)	<0,001*
SHBG (nmol/L) [median (min. – max.)]	27,80 (9,93 – 76,60)	53,80 (6,77 – 156,00)	<0,001*
Total Testosterone (ng/mL) (mean \pm SD)	34,83 \pm 13,52	24,82 \pm 8,63	0,001**
DHEAS (mcg/dL) (mean \pm SD)	264,51 \pm 100,32	216,56 \pm 96,57	0,06**
Androstenedione (ng/mL) (mean \pm SD)	3,49 \pm 1,27	2,36 \pm 1,27	0,001**
FSH (mIU/L) (mean \pm SD)	6,29 \pm 1,23	7,37 \pm 2,22	0,038**
LH (mIU/L) [median (min. – max.)]	5,16 (0,87 – 14,56)	4,33 (1,93 – 9,38)	0,064*
Estradiol (pg/mL) [median (min. – max.)]	39,00 (19,34 – 135,78)	48,81 (23,11 – 113,36)	0,072*
TSH (mIU/L) [median (min. – max.)]	1,55 (0,57 – 3,64)	1,86 (0,67 – 3,64)	0,328*
Prolactin (mg/mL) (mean \pm SD)	9,96 \pm 3,99	14,18 \pm 5,76	0,001**
AMH (ng/mL) (mean \pm SD)	7,77 \pm 5,57	3,27 \pm 1,61	<0,001**

*: Comparing the minimum – maximum values of non-normal distributed data with the Mann Whitney U test. **: Comparing the mean and standard deviation values of normal distributed data with t-test.

Table 4: Comparison between patients with PCOS and the control group for the ages between 26 and 30. Significance was considered as $p < 0.05$.

	PCOS (n=31)	Controls (n=31)	p
Age [median (min. – max.)]	32 (31 – 35)	34 (31 – 35)	0,103*
Height (m) [median (min. – max.)]	1,60 (1,50 – 1,76)	1,62 (1,49 – 1,80)	0,915*
Weight (kg) [median (min. – max.)]	67 (43 – 120)	60 (46 – 85)	0,038*
BMI (kg/m ²) (mean \pm SD)	27,33 \pm 7,47	23,39 \pm 3,24	0,009**
Ferriman-Gallwey Score [median (min. – max.)]	10 (3 – 16)	8 (2 – 14)	0,006*
Total Antral Follicle Count [median (min. – max.)]	26 (10 – 33)	9 (2 – 27)	<0,001*
SHBG (nmol/L) (mean \pm SD)	46,3 \pm 22,29	56,19 \pm 25,02	0,109**
Total Testosterone (ng/mL) (mean \pm SD)	25,36 \pm 15,18	24,68 \pm 6,74	0,001**
DHEAS (mcg/dL) (mean \pm SD)	215,74 \pm 84,3	198,64 \pm 99,55	0,468**
Androstenedione (ng/mL) [median (min. – max.)]	2,54 (0,80 – 7,20)	2,16 (0,47 – 4,03)	0,097*
FSH (mIU/L) [median (min. – max.)]	6,85 (3,43 – 11,60)	7,83 (1,97 – 30,09)	0,364*
LH (mIU/L) [median (min. – max.)]	6,31 (3,17 – 27,00)	4,45 (0,79 – 10,46)	0,003*
Estradiol (pg/mL) [median (min. – max.)]	40,84 (4,56 – 208,73)	50,64 (11,00 – 356,01)	0,081*
TSH (mIU/L) [median (min. – max.)]	1,72 (0,84 – 4,04)	1,89 (0,40 – 4,50)	0,394*
Prolactin (mg/mL) [median (min. – max.)]	10,36 (2,80 – 22,01)	13,55 (2,81 – 29,10)	0,051*
AMH (ng/mL) [median (min. – max.)]	5,63 (0,90 – 12,73)	1,45 (0,04 – 6,86)	<0,001*

*: Comparing the minimum – maximum values of non-normal distributed data with the Mann Whitney U test. **: Comparing the mean and standard deviation values of normal distributed data with t-test.

Table 5: Pearson's Correlation Analysis for total antral follicle count and serum AMH concentration. Significance was considered as $p < 0.05$.

Age Group	{r}	n	p
21 - 25	0.71	63	<0.001
26 - 30	0.66	62	<0.001
31 - 35	0.79	62	<0.001

SS-061 [Jinekoloji Genel]

Do meibomian gland function and tear functions change in different phenotypes of polycystic ovary syndrome?

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PURPOSE: In this study, it was aimed to determine Meibomian Gland functions and Tear function changes in the subtypes of Polycystic Ovary Syndrome.

MATERIALS-METHODS: The prospective study included 100 women and 25 healthy women diagnosed with pcos according to the rotterdam criteria and divided into 4 separate subtypes. 50 eyes of 25 women for each phenotype and 50 eyes of 25 healthy women for the control group were examined. A complete ophthalmologic examination and dry eye tests including Schirmer 1 and tear film break-up time (BUT) were performed on all patients. Symptoms were scored with the validated Ocular Surface Disease Index (OSDI) questionnaire.

RESULTS: There was a significant difference between PCOS phenotypes and the control group in OSDI score ($p=0.004$), TBUT test ($p=0.003$) and MBD ($p=0.002$) values. The phenotypes of the PCOS group had a lower mean Schirmer test value than the control group, but it was not statistically significant ($p=0.0597$).

A negative correlation was found between TBUT values and BMI. ($r=-0.169, p=0.001$)

However, BMI was found to be positively correlated with OSDI score and MBD. ($r=+0.184, p=0.001, r=+0.452, p=0.001$)

There was a weak negative correlation between serum testosterone, estradiol levels and TBUT, Schirmer test.

CONCLUSION: Tear film instability due to MGD that occurs in patients with pcos is associated with hormonal changes due to pcos and is more common in people with high BMI. It should be kept in mind that eye functions may be affected, especially in obese PCOS patients. Early diagnosis and treatment should be provided.

Keywords: polycystic ovary syndrome, tear function, dry-eye syndrome, meibomian gland dysfunction

SS-062 [Jinekoloji Genel]

Do serum hepassocin levels change in women with polycystic ovary syndrome?

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BACKGROUND: Insulin resistance is common in polycystic ovary syndrome (PCOS), especially in obese patients. Hepassocin is a peptid marker which increases in obesity and insulin resistance.

OBJECTIVE: We aimed to investigate hepassocin levels in patients with PCOS in this study.

METHODS: This prospective case-control study was conducted with a total of 60 patients with PCOS and age-matched 30 healthy women with body mass index < 30. Patients with PCOS were classified as obese PCOS and non-obese PCOS according to their BMI. Hepassocin levels were measured by using a commercially available enzyme-linked immunosorbent assay (ELISA) kit. A multivariate linear regression analysis was used to determine independent factors related to hepassocin levels.

RESULTS: Hepassocin levels of the obese-PCOS group were found significantly higher than non-obese PCOS and control group (6.95 ± 3.59 , 2.69 ± 2.51 , 2.66 ± 2.22 , respectively, $p < 0.001$). There was no significant difference in hepassocin levels between control and non-obese PCOS group ($p = 0.99$). Homeostatic Model Assessment for Insulin Resistance (HOMA-IR) was independently associated with hepassocin concentrations after adjusting for age, low density lipoprotein C (LDL-C), high density lipoprotein C (HDL-C), triglyceride (TG), total testosterone, dehydroepiandrosterone sulfate (DHEA-S), and C reactive protein (CRP).

CONCLUSION: Obese patients with PCOS exhibited high serum levels of hepassocin. HOMA-IR index was found as the independent variable associated with high levels of hepassocin. Hepassocin can be used as a simple and easy way of detecting insulin resistance in obese patients with PCOS.

Keywords: HOMA-IR, Hepassocin, Insulin resistance, Obesity, Polycystic ovary syndrome.

SS-063 [Jinekoloji Genel]

Evaluation of genetic polymorphisms associated with polycystic ovary syndrome

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Polycystic ovary syndrome (PCOS) is a syndrome in which signs and symptoms vary and cannot be diagnosed with a single symptom or diagnostic test. However, the fact that patients face serious problems such as abnormal uterine bleeding, obesity, infertility, type 2 diabetes mellitus (DM), cardiovascular diseases, hypertension, dyslipidemia, and endometrial cancer emphasizes the importance of accurate diagnosis PCOS in women. In recent years, it has been imperative to identify genetic variants that will illuminate the etiopathogenesis of PCOS, including genes that regulate insulin secretion and action, weight and energy regulation, androgen synthesis and action. Our study aims to elucidate the genetic factors and molecular mechanisms involved in the etiology and pathogenesis of PCOS. The sample size was determined using the power analysis software G-Power V 3.1.9.4. Newly diagnosed 60 patients and 100 healthy volunteers between the ages of 20 and 28 were included in our study. The presence of oligo or anovulation accompanying clinical or biochemical hyperandrogenism was considered sufficient for the diagnostic criteria. While creating the control group, it was tried to ensure that the participants' Body Mass Index (BMI) distribution was equal to the PCOS group. After signing the informed consent form, 2 mL of peripheral blood samples were taken from the volunteers. Genomic DNA was isolated from blood samples taken by the kit protocol. PCR was performed to identify polymorphisms in TNF-R (tumor necrosis factor receptor) and PPAR (peroxisome proliferator-activated receptor-gamma) genes with primers specially designed for the relevant gene regions. After PCR, samples were sequenced by the Sanger sequencing method to determine genotypes. Results were loaded into SPSS V.20.0 program and analyzed by chi-square test and Student's t-test. In this study, PPAR-associated Pro12Ala, His447His, and C161T and TNF-α gene-associated promoter 1031 (T/C) G308A, G850T, G238A, and IL-6 gene-associated -174G/C SNPs were investigated. Our study found a significant relationship between TNF-α 1031 T>C and PCOS, which supports the general assumptions. In addition, TNF-α and IL-6 levels were statistically significantly higher in our PCOS patient group than in the control group. Genetic, immunological, metabolic, and environmental factors interact in PCOS development. Our study results found that the G308A polymorphism was associated with an increased risk of PCOS, and there was a statistically significant increase in hyperandrogenism and increased insulin levels in patients with this polymorphism. However, the obesity rate was also high in these patients. The high obesity rate was not statistically significant compared to the control group. This result is independent of the effects of obesity itself; It has been interpreted that increased androgen levels and insulin resistance may be due to the contribution of increased TNF-α and activated inflammatory pathways. Our study found a significant relationship between hyperandrogenism and insulin resistance, considering metabolic indicators, increased TNF levels, and SNPs detected in the TNF gene. According to these results, we think that these genetic variations in the pathogenesis of PCOS and especially the mechanisms triggered by inflammation and inflammatory pathways in ovarian androgens and insulin resistance pathways are affected.

Keywords: Pcos, Polymorphism, Ppar, Tnf

SS-064 [Jinekoloji Genel]

The role of Cysteinyl Leukotriene Levels as an Inflammatory Marker in Polycystic Ovary Syndrome

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OBJECTIVE: Cysteinyl leukotrienes (CysLTs) are potent lipid inflammatory mediators synthesized by 5-lipoxygenase pathway in allergic disorders as well as chronic inflammatory diseases such as obesity, insulin resistance, and cardiovascular diseases. This study aims to investigate the serum levels of CysLTs, as an inflammatory marker, in patients with polycystic ovary syndrome (PCOS).

Design: Case-control study

Settings: A teaching hospital

Materials: There were 43 women who were diagnosed with PCOS and 41 healthy volunteer women as controls.

METHODS: For all study participants, demographic characteristics, blood pressure, body mass index (BMI), waist circumference, Ferriman-Gallwey score, hormone profiles, androgen levels, and lipid parameters were recorded. Insulin resistance, the presence of metabolic syndrome, Lipid Accumulation Product (LAP) index, and 30 year- Framingham cardiovascular risk score was assessed for all participants. Serum CysLTs level was measured by ELISA technique.

RESULTS: The mean age of the PCOS group was lower than the control group (24.26 ± 4.52 vs. 26.20 ± 3.97 , $p=0.03$). The PCOS group had statistically significantly higher BMI, systolic blood pressure, waist circumference, Ferriman-Gallwey score, total testosterone, triglyceride, fasting glucose, and insulin levels with lower high-density lipoprotein levels than the controls (Table 1). When the two groups were compared in terms of metabolic disease characteristics, there was statistically significantly higher number of women who had insulin resistance, metabolic syndrome, and higher LAP score in the PCOS group (Table 2). The serum CysLTs levels were not different between the PCOS and the controls (380.3 [$211.3 - 615.2$] vs. 366.1 [$306.8 - 880$], $p = 0.42$; respectively) (Table 1). **Limitations:** The groups were not defined as obese and non-obese.

CONCLUSION: In addition to reproductive traits, PCOS is associated with cardiometabolic risk factors including central obesity, hyperlipidemia, and impaired insulin resistance. Although the etiopathogenesis of PCOS has not been fully elucidated, the markers of chronic low-grade inflammation and oxidative stress have been frequently studied in recent years. On the other hand, CysLTs are potent mediators of inflammation in allergic disorders. Besides, current evidence places emphasis on CysLTs as potential markers in other inflammatory conditions such as obesity, atherosclerosis, psoriasis, cancer, and macular degeneration. However, we did not observe any differences in the serum CysLT levels between the PCOS and control groups although the PCOS group consisted of women who carry on the significant clinic and metabolic features of PCOS. Our results suggested that inflammatory 5-lipoxygenase / CysLT pathway did not play an

active role in women with PCOS. We hope our preliminary study will lead to future studies that would be conducted with more comprehensive and large populations to reveal the relationship between PCOS and CysLTs and their role in cardiovascular disease.

Keywords: polycystic ovary syndrome, cysteinyl leukotriene, inflammation, cardiovascular disease.

Table 1

	PCOS group (n= 43)	Control group (n= 41)	p value
Age	24.26 ± 4.52	26.20 ± 3.97	0.03
Gravida	0 (0 - 0)	0 (0 - 1)	0.45
Parity	0 (0 - 0)	0 (0 - 1)	0.62
Smoking status			
No	30 (69.8%)	31 (75.6%)	
Yes	13 (30.2%)	10 (24.4%)	0.55
Age of menarche	13.31 ± 1.31	13.13 ± 1.40	0.73
BMI	26 (23 - 31)	21 (19 - 25)	< 0.001
Systolic BP	120 (110 - 125)	110 (100 - 110)	0.001
Diastolic BP	70 (65 - 80)	70 (60 - 70)	0.09
Waist circumference	94 (85 - 103)	75 (67 - 85)	< 0.001
Ferriman-Gallwey score	11.30 ± 4.87	2.46 ± 2.23	< 0.001
TSH	1.96 (1.42 - 3.0)	2.24 (1.53-3.38)	0.55
PRL	15.77 (11.29 - 20.33)	14.42 (9.69 - 18.55)	0.36
Total testosterone (ng/ml)	0.46 (0.35 - 0.6)	0.33 (0.24 - 0.45)	0.004
Androstenedione (mosm/kg)	3.35 (2.2 - 4.7)	2.72 (1.81 - 3.3)	0.014
DHEA-SO4	286 (241-360)	236 (172.5 - 286.5)	0.01
17-OH Progesterone	1.87 (1.39 - 2.44)	1.29 (1.04 - 1.76)	0.003
CRP	1.3 (0.80 - 4)	1.0 (0.5 - 2.7)	0.09
Total cholesterol	157 (140 - 186)	175 (152 - 197)	0.13
Triglyceride	120 (78 - 165)	90 (68 - 119)	0.003
HDL	48.10 (38 - 58)	55.0 (49.2 - 68.6)	0.003
LDL	84 (70 - 114.1)	93 (76 - 111)	0.44
Fasting blood sugar	92 (86 - 96)	89 (81.5 - 92.5)	0.049
Insulin	15.95 (9.51 - 22.55)	8.27 (5.4 - 12.2)	< 0.001
HOMA-IR	3.70 (2.2 - 5.5)	1.80 (1.40-3,00)	< 0.001
Serum CysLTs level	380.3 (211.3 - 615.2)	366.1 (306.8 - 880)	0.42

Demographic and clinical characteristics of the study participants.

Table 2

	PCOS group (n= 43)	Control group (n= 41)	p value
Hirsutism			
No	4 (9.3%)	39 (92.7%)	
Yes	39 (90.7%)	3 (7.3%)	<0.001
Insulin resistance			
No	13 (30.2%)	27 (69.2%)	
Yes	30 (69.8%)	12 (30.8%)	<0.001
Dyslipidemia			
No	14 (32.6%)	20 (51.2%)	
Yes	29 (67.4%)	21 (48.8%)	0.08
Metabolic syndrome			
No	25 (58.1%)	39 (95.1%)	
Yes	18 (41.9%)	2 (4.9%)	<0.001
LAP index	91,16 (65.3 - 163.6)	36.2 (13.9 - 83.7)	<0.001
High 30-year Framingham risk score	3 (2-6)	3 (2-4)	0,687

Comparison of the number of women with metabolic disease states in the PCOS and the control groups.

SS-065 [Jinekoloji Genel]

The role of Ficolin-3 and the inflammatory markers in the etiopathogenesis of Polycystic Ovary Syndrome

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AIM: Genetic factors, insulin resistance, alterations in steroidogenesis, and defects in gonadotropin secretion are the most common causes of Polycystic Ovary Syndrome (PCOS) etiopathogenesis. Unfortunately, the cause of PCOS is still not clearly understood. Ficolins are important serum proteins that activate the lectin-dependent pathway to opsonize infected microorganisms. Ficolin 3 (H-ficolin) is synthesized from primary liver and lung and plays a role in systemic or local innate immunity. The aim of our study is to investigate whether Ficolin-3 levels and inflammatory markers [Platelet distribution width (PDW) PLR; Platelet to lymphocyte ratio (PLR), neutrophil to lymphocyte ratio (NLR)] in patients with PCOS differ from those of healthy women and to investigate the role of complement activation in the etiopathogenesis of PCOS.

METHODS: Forty female patients aged 18-30 years did not smoke, had been diagnosed with PCOS according to the Rotterdam criteria, had no systemic diseases, and were not taking any medications (Group 1) participated in the study. Age and body mass index (BMI) matched 40 patients with regular menstrual cycles who routine checkups were included in the study as a control group. Demographic data such as age, gravida, parity, BMI, number of annual menstrual cycles, Ferriman Gallwey score were compared between groups. In addition, biochemical parameters (Fasting Glucose, Fasting Serum Insulin, HOMA-IR index, HDL, LDL), hormonal parameters, FAI (Free Androgen Index) and Ficolin-3 levels were compared. Additionally inflammatory markers of complete blood count were compared. Serum samples for Ficolin-3 level were analyzed by ELISA method.

RESULTS: The most common symptom of PCOS patients was menstrual irregularity, which was complained by 24 (60%) patients, and anovulation was present in 37 (92.5%) patients. At ultrasound (USG) examination, 38 (95%) patients were found to have polycystic ovary. Significant differences were observed between groups in gravida, parity, number of annual menstrual cycles, and Ferriman-Gallwey score ($p < 0.05$) (Table 1). Fasting glucose, LH, LH /FSH ratio, PRL, total testosterone, AMH, FAI were significantly higher in PCOS patients than in the control group ($p < 0.05$) (Table 2). Ficolin-3 level was significantly higher (7.32 ± 1.95 µg/ml vs. 5.95 ± 1.81 µg/ml), neutrophil to lymphocyte ratio (NLR) was lower (1.99 ± 0.72 vs. 2.61 ± 1.30) in PCOS patients compared to control group ($p=0.002$) (Table 2). In the correlation analysis performed between inflammatory markers and Ficolin-3, a negative correlation was observed between Ficolin-3 and NLR ($p<0,05$) (Table 3). Ficolin-3 was found to be predictive for PCOS (area under curve = 0.695, $p = 0.03$, shown in Figure 1). The optimum cutoff value was stated to be 5.95, with 52% sensitivity and 77% specificity (Table 4).

CONCLUSION: In our study, Ficolin-3, one of the major regulators of the complement system, was found to be increased in PCOS patients. Considering that PCOS is a chronic inflammatory disease, activation of the complement system may play an important role in the etiopathogenesis of PCOS.

Keywords: Polycystic Ovary Syndrome, Ficolin-3, NLR**Table 1. Demographic and clinical data of the patients**

Characteristics	Total (n= 80)	GROUP 1 PCOS (n=40)	GROUP 2 Control (n=40)	p
Age (mean±SD) (year)	24,88 ± 3,65	24,80 ± 3,51	24,95 ± 3,51	0,62*
BMI (mean±SD) (kg/m2)	25,08 ± 4,03	25,26 ± 4,10	24,91 ± 3,99	0,70*
Gravida (min – max)	0-4	0-3	0-4	0,002**
Parity (min – max)	0-4	0-3	0-4	0,003**
Number of Annual Menstrual Cycles (mean±SD)	9,63 ± 2,71	7,48 ± 2,13	11,78 ± 0,92	0,00*
Ferriman Gallwey Score (mean±SD)	8,13 ± 3,10	10,58 ± 1,96	5,68 ± 1,84	0,00*

Mean±SD; mean ±standard deviation * Student's t-test ** Mann Whitney – U Test

Table 2. Biochemical, hormonal and inflammatory data of the patients

Characteristics	Total (n= 80) Mean ± SD	GROUP 1 PCOS (n=40) Mean ± SD	GROUP 2 Control (n=40) Mean ± SD	p
Fasting Glucose (mg/dL)	94,03 ± 16,56	88,38 ± 10,39	99,68 ± 19,54	0,003**
Fasting Serum Insulin (uIU/ml)	12,62 ± 7,86	12,48 ± 7,64	12,75 ± 8,17	0,74**
HOMA-IR index	3,02 ± 2,32	2,78 ± 1,95	3,26 ± 2,64	0,26**
HDL (mg/dL)	56,53 ± 13,47	56,30 ± 14,94	56,75 ± 12,01	0,88*
LDL (mg/dL)	108,81 ± 47,54	119,13 ± 57,16	98,50 ± 33,07	0,11**
FSH (U/L)	5,91 ± 2,05	5,45 ± 1,31	6,37 ± 2,53	0,12**
LH (U/L)	7,00 ± 4,14	7,94 ± 4,52	6,06 ± 3,53	0,01**
LH/FSH	1,22 ± 0,66	1,45 ± 0,71	0,99 ± 0,51	0,000**
E2 (ng/L)	46,90 ± 34,20	41,73 ± 30,60	52,08 ± 37,13	0,06**
TSH (µIU/ml)	1,84 ± 1,07	1,88 ± 1,24	1,80 ± 0,88	0,73*
17-OHP (ng/ml)	0,52 ± 0,55	0,51 ± 0,60	0,53 ± 0,50	0,71**
Prolactine Hormone (µg/L)	16,24 ± 8,76	18,12 ± 10,76	14,36 ± 5,68	0,05*
Total Testosterone (µg/L)	0,33 ± 0,30	0,42 ± 0,40	0,24 ± 0,09	0,001**
DHEASO4 (ng/L)	219,18 ± 91,92	238,45 ± 96,89	199,91 ± 83,46	0,06*
SHBG (nmol/L)	72,16 ± 50,08	65,73 ± 53,32	78,59 ± 46,39	0,25*
AMH (mg/ml)	5,35 ± 3,73	7,38 ± 3,57	3,33 ± 2,67	0,000*
FAI	0,79 ± 1,10	1,10 ± 1,44	0,48 ± 0,41	0,004**
Ficolin-3 (µg/mL)	6,63 ± 1,99	7,32 ± 1,95	5,95 ± 1,81	0,002*
PDW	29,23 ± 17,84	30,53 ± 18,61	27,93 ± 17,18	0,51*
PLR	126,14 ± 36,30	127,64 ± 38,07	124,65 ± 34,86	0,71*
NLR	2,30 ± 1,09	1,99 ± 0,72	2,61 ± 1,30	0,01*

Mean±SD; mean ±standard deviation * Student's t-test ** Mann Whitney – U Test. HDL; High-Density lipoprotein, LDL; Low-Density Lipoprotein, FSH; Follicle Stimulating Hormone, LH; Luteinizing Hormone, E2; Estradiol, TSH; 17OHP; 17 hydroxyprogesterone, DHEASO4; dehydroepiandrosterone sulfate, SHBG; Sex hormone-binding globulin, AMH; Anti-Mullerian hormone, FAI; Free Androgen index PDW; Platelet distribution width, PLR; Platelet to lymphocyte ratio NLR;neutrophil to lymphocyte ratio

Table 3. Correlations between Ficolin-3 and inflammatory markers

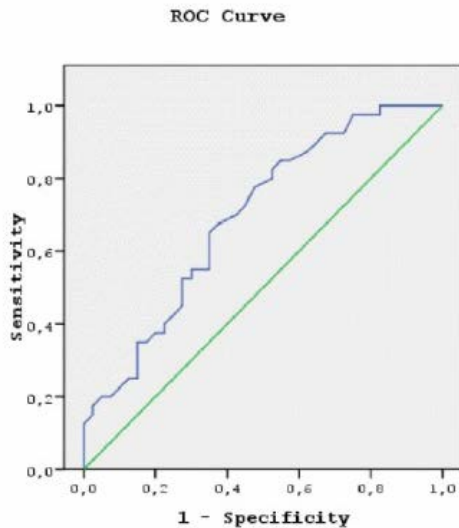
	p	
PDW	0,77	No correlation
PLR	0,35	No correlation
NLR	0,005*	Negative correlation

Pearson correlation test (at 0,01 significance level) PDW; Platelet distribution width, PLR; Platelet to lymphocyte ratio NLR;neutrophil to lymphocyte ratio

Table 4. Cut off value of Ficolin-3 in patients with PCOS

EAA	Cut off	p	Sensitivity (%)	Specificity (%)
0,695	5,95	0,003	0,775	0,525

Figure 1. Receiver-operator curves analysis for Ficolin-3 in patients with PCOS



SS-066 [Infertilite]

Influence of metabolic syndrome on in vitro fertilization outcomes in PCOS women

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AIM: Polycystic ovary syndrome (PCOS) is recognized as the most common endocrine disorder of reproductive-age women. PCOS shares many similarities with metabolic syndrome (MetS) in pathophysiology and clinical features, including abdominal obesity, insulin resistance, and dyslipidemia. Studies showed that the prevalence of MetS in PCOS vary in different populations and is nearly 2-fold higher than age-matched women in the general population. MetS is defined as a constellation of metabolic disorders including abdominal obesity, glucose intolerance or insulin resistance, dyslipidemia, and hypertension. As in obesity in general, insulin resistance and dyslipidemia, typical characteristics of MetS, have been deduced to have negative effects on fertility and pregnancy with compromised embryo development, impaired endometrial receptivity, and poor reproductive outcomes. However, few studies have focused on associations between MetS and female fertility and in vitro fertilization (IVF) outcomes. In the present study, we aimed to explore the influences of MetS on female fertility and IVF outcomes.

METHODS: A retrospective study was performed between January 1, 2016 and February 28, 2021 at the Etlik Zübeyde

Hanım Women's Health Teaching and Training Hospital IVF Clinic. Two hundreds and twenty two women with PCOS undergoing ovulation induction for IVF were enrolled the study. This study evaluated subjects assigned to 2 groups: the MetS group and the non-MetS group. MetS was diagnosed by the global definition with waist circumference (WC) for Asians with 3 or more of the following criteria: (1) WC > 80 cm; (2) triglyceride (TG) > (150 mg/dL); (3) high-density lipoprotein-cholesterol (HDL-C) < (50 mg/dL) (4) blood pressure > 130/85 mm Hg and (5) fasting plasma glucose > (100 mg/dL). Demographic and clinical characteristics were compared between the MetS group and the non-MetS group.

RESULTS: MetS was present in 29.7% of subjects. Those with MetS had significantly greater BMI (27.1 ± 5.6 kg/m² vs 32.2 ± 3.7 kg/m², $P < .001$). Both groups were similar with respect to duration of infertility. Age and total testosterone were significantly higher in the MetS group. As expected, those with MetS had significantly higher systolic and diastolic blood pressure, fasting plasma glucose, TGs and homeostatic model assessment of insulin resistance (HOMA-IR) and a significantly lower HDL level compared with those without MetS. Total dose of gonadotropin used were significantly higher in those with MetS (1435.6 ± 480.7 vs 1602.1 ± 448.8 p=0.003). Antral follicle counts, AMH levels, duration of stimulation, serum luteinizing hormone on hCG day, peak E2 levels, peak progesterone levels on hCG day, number of oocytes retrieved and endometrial thickness were comparable between groups. Clinical pregnancy rate was higher in non-MetS group but without significant between-group difference (p=0.29).

CONCLUSION: PCOS and MetS may have a negative impact on female fecundity and suggests a negative association of MetS and IVF cycle stimulation characteristics and clinical outcomes but the difference did not reach a level of statistical difference. Furthermore, the prevalence may be higher in infertile PCOS women than age-matched reproductive women and highlights the importance of metabolic profile screening prior to assisted reproduction therapy.

Keywords: In vitro fertilization, metabolic syndrome, polycystic ovary syndrome

Demographic and baseline profiles of women with PCOS and with and without MetS

	Non-MetS group	MetS group	
n(%)	156 (70.3)	66 (29.7)	
mean \pm SD	mean \pm SD		p
Age, years	27.9 \pm 3.9	29.9 \pm 4.7	0.003
BMI, kg/m ²	27.1 \pm 5.6	32.2 \pm 3.7	0.001
Duration of infertility, years	6.0 \pm 3.4	6.9 \pm 4.4	0.330
Triglyceride, g/L	109.3 \pm 38.1	209.6 \pm 88.6	0.001
Fasting blood glucose, g/L	88.5 \pm 9.9	97.1 \pm 13	0.001
HDL, g/L	52.3 \pm 12.4	43.3 \pm 5.8	0.001
Waist circumference, cm	89 \pm 16.3	102.2 \pm 10.9	0.001
Blood pressure systolic, mmHg	107.3 \pm 10.4	117.2 \pm 10.3	0.001
Blood pressure diastolic, mmHg	67.1 \pm 8.2	74.3 \pm 13.4	0.001
Antral follicle count	23.9 \pm 0.4	23.7 \pm 1	0.093
Basal FSH, IU/L	6.2 \pm 1.4	6.3 \pm 1.1	0.577
Basal LH, IU/L	7 \pm 5.1	7.6 \pm 4	0.058
Basal E2, pg/mL	49.5 \pm 18.3	48.4 \pm 17.1	0.814
Insuline, μ IU/mL	11.06 \pm 9.66	16.94 \pm 13.06	0.001
HOMA-IR	2.40 \pm 0.23	4.05 \pm 0.41	0.040
AMH, ng/mL	9.7 \pm 6.6	10 \pm 5.9	0.352
Total testosterone, ng/dL	0.5 \pm 0.3	0.8 \pm 0.3	0.001
DHEASO4, μ g/dL	249.2 \pm 132.8	226.6 \pm 114.9	0.474

Cycle stimulation characteristics in women with PCOS and with and without MetS

	Non-MetS group	MetS group	
	mean±SD	mean±SD	p
total gonadotropin dose, IU/L	1435.6 ± 480.7	1602.1 ± 448.8	0.003
duration of ovarian stimulation, days	9.9 ± 1.9	10.2 ± 2.2	0.384
estradiol on day of hCG, pg/mL	3616 ± 2148.7	3865.3 ± 2588.7	0.853
progesterone on day of hCG, pg/mL	1.1 ± 0.7	1.1 ± 0.8	0.528
LH on day of hCG, IU/LI	3.6 ± 3.6	4.6 ± 5.1	0.123
endometrial thickness, mm	9.6 ± 2.9	9.4 ± 3.5	0.650
number of oocyte retrieved	15.3 ± 8.1	17.9 ± 10.8	0.132
fertilized oocyte number(2PN)	5.9 ± 4.2	7.7 ± 5.1	0.011
Clinical pregnancy yes,n(%)	45(28.8)	52(21.2)	0.239
Clinical pregnancy no,n(%)	111(71.2)	14(78.8)	0.239

SS-067 [İnfertilite]**The association between PCOS and congenital uterine abnormalities**

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OBJECTIVE: In the recent ESHRE-ESGE classification of uterine abnormalities, the others (class u1c) section was added under the definition of the dysmorphic uterus (class u1), and minor deformities which are separated from the septate uterus were started to be categorized under this section. However, the clinical consequences of dysmorphic uteri with Y-shaped cavities need to be further investigated. Several studies have shown a relationship between PCOS, in which AMH is highly elevated, and Mullerian anomalies. In this study, we aimed to define the morphological features of the Y-shaped uterus and investigate the relationship between PCOS and the Y-shaped uterus.

METHODS: A retrospective cohort study was conducted in the tertiary referral center. Infertile patients who underwent uterine imaging between January 2018 and June 2020 were assessed for eligibility from the hospital records. All of the patients were evaluated according to the Rotterdam ESHRE/ASRM PCOS Consensus Workshop Group diagnostic criteria for PCOS at clinical admission. Demographic variables such as age, AMH, FSH, LH, TSH, PRL, and B-HCG were achieved from the hospital records. The patients' images were re-evaluated by two separate physicians who were blinded to the initial clinical diagnosis of the primary physician, the study group the subject included (PCOS or non-PCOS), and each other. The diagnoses were made using the measurement methods specified by Ludwing et al. in 2011 and 2020, and the defined Mullerian anomalies were classified according to the ASRM classification system. The patients with a Y-shaped uterus were re-evaluated, and descriptive measurements were performed.

RESULTS: Totally, 282 women during the study period were assessed for eligibility. Among those, 43 were excluded due to previous uterine surgery history, and 26 were excluded due to non-optimal images. As a result, 213 patients were included in the final analyses. Of the included patients, 57 had PCOS (26.8%), and 156 did not have PCOS (73.2%). Demographic variables and baseline hormone levels were similar between the groups except for AMH and FSH. The frequency

of uterine anomalies in patients with PCOS was significantly higher than in patients without PCOS (45.6% vs. 35.3%, respectively). The Y-shaped uterus was the most common uterine anomaly in the PCOS group. A Y-shaped uterus diagnosis was made when it was confirmed by both of the authors. Among all, the authors diagnosed 29 women with a Y-shaped uterus and agreed on 25 diagnoses (inter-observer agreement rate 86.2%). Following the selection of women with Y-shaped uteri, we performed several measurements on all images to identify strict Y-shaped uterus criteria. Y-shaped uterus' diagnostic criteria have been specified as; lateral indentation angle in the range of 121-149°; lateral indentation depth between 4-7 mm; Y-angle between 25-46°.

Conclusion(s): We found a higher frequency of uterine abnormality in PCOS patients than in the non-PCOS group in the infertile population. When we evaluated our results together with the literature, we thought that the reason for this might be because of the direct effect of AMH on the HOX and WNT genes or the increased testosterone bioavailability with indirectly decreased placental CYP19a1 effect.

Keywords: polycystic ovary syndrome, uterine abnormalities, Y-shaped uterus, Mullerian anomalies, Anti-Mullerian Hormone

The relationship between PCOS and Y-Shaped Uterus

	PCOS (N=57)	Non-PCOS (N=156)	P-value
Y-SHAPED UTERUS	13(22.8%)	12(7.7%)	
NON-Y SHAPED UTERUS	44(77.2%)	144(92.3%)	0.002

PCOS; polycystic ovary syndrome. Values represent as number (percentages), there was a significant relationship between PCOS and Y-Shaped Uterus. ($X^2(1) \geq 11.341$, $P=0.002$)

SS-068 [Jinekoloji Genel]**The effect of hyperlipidemia on mammography results in postmenopausal women**

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OBJECTIVE: Breast cancer is one of the most common cancers in women and mammography is the most commonly screening test for this cancer type. High breast density and microcalcifications on mammography can be early signs of breast cancer. There are some number of studies showing the relationship of hyperlipidemia with breast density and calcifications. In our study, the effect of hyperlipidemia on postmenopausal mammography results was evaluated.

METHOD: The study was designed as a retrospective research and the data were obtained by two independent researchers from among the naturally menopausal patients who applied to the Etlik Zubeyde Hanim Training and Research Hospital menopause outpatient clinic. Sample size was calculated by power analysis. The analysis was calculated with an effect size of 0.20, an error of 0.05, and a power of 0.80. A total of 180 participants were identified. Participants with hyperlipidemia were

designed as Group 1 (n=90); Group 2 (n=90) was designed as control group with participants had normal blood lipid levels. While creating the groups; total cholesterol values above 200 mg/dl were included in Group 1 and cholesterol values below 200 mg/dl were included in Group 2. Morbidly obese; patients with a history of breast cancer or previously known mammographic changes; hyperlipidemias due to underlying secondary diseases such as Cushing; patients with systemic disease and lipid metabolism affecting drug usage were excluded from the study.

RESULTS: Age and body mass index (BMI) can affect breast density and calcifications. In the study there was no statistically significant difference between age and BMI ($p=0.058$; $p=0.079$) (Table.1). In addition, there was no statistically significant difference between the groups in terms of smoking and family history of breast cancer ($p=0.079$; $p=0.515$) (Table.1). There was a statistically significant difference between Group 1 and Group 2 in terms of BIRADS grades showing breast density ($p=0.042$). As, higher blood lipid levels caused high breast density significantly (Table.2). Calcification was observed in 51.1% of Group 1 participants, and in 31.1% of Group 2 participants. While blood lipid levels increased, the detection of calcification was found to be statistically significant ($p=0.006$) (Table.2).

CONCLUSION: In our study; high serum lipid levels were found to be associated with increased breast density and calcifications. However, the results should be confirmed by prospective, randomized and controlled studies in future.

Keywords: mammography, postmenopause, breast cancer, calcification, hyperlipidemia

Table.1: Comparison of the groups in terms of age, BMI and blood lipid profiles

	Group 1					Group 2						
	Min.	Max.	X	std.	Median	Min.	Max.	X	std.	Median	t	p
Age	45	78	60,61	6,9	60,00	48	76	58,64	6,93	57,00	1,908	0,058
BMI	19	40	28,67	4,15	29,00	22	36	27,74	2,69	28,00	1,768	0,079
T-C	200	390	250,89	38,21	243,00	117	199	173,38	18,30	178,00	17,358	0,000
LDL-C	30	296	158,04	34,73	153,00	57	160	101,23	17,98	102	13,783	0,000
VLDL-C	10	75	29,58	13,96	26,00	9	32	19,36	5,33	19,00	6,489	0,000
HDL-C	36	107	60,98	13,63	62,00	33	160	52,83	13,71	54,00	3,997	0,000
TG	50	655	155,31	87,73	133,00	45	150	99,47	26,44	97,00	5,782	0,000

BMI: body mass index; T-C: total cholesterol; LDL-C: low density lipoprotein cholesterol; VLDL-C: very low density lipoprotein cholesterol; HDL-C: high density lipoprotein cholesterol; TG: triglyceride; std: standard deviation; t: t-test; $p<0.05$

Table.2: Comparison of the groups in terms of BIRADS, calcification, smoking status and familial breast cancer history

	Group 1		Group 2		x2	p
	n	%	n	%		
BIRADS						
0	4	4,4	0	0,0		
1	46	51,1	61	67,8	8,226	0,042
2	34	37,8	23	25,6		
3-4	6	6,7	6	6,7		
Calcification						
NO	44	48,9	62	68,9	7,435	0,006
YES	46	51,1	28	31,1		
Smoking status						
NO	74	82,2	82	91,1	3,077	0,079
YES	16	17,8	8	8,9		
Familial breast cancer history						
NO	84	93,3	86	95,6	0,424	0,515
YES	6	6,7	4	4,4		

$p<0.05$; X2: Chi-square test; BIRADS: Breast Imaging Reporting and Data Systems

SS-069 [Jinekoloji Genel]

Evaluation of serum fetuin-a levels in postmenopausal women

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OBJECTIVE: Metabolic syndrome is a systemic endocrinopathy associated with insulin resistance, abdominal obesity, glucose intolerance, diabetes mellitus, dyslipidemia, hypertension and coronary artery disease. Fetuin-A is a glycoprotein found in human and synthesized mainly from the liver. High levels of Fetuin-A have been associated with many conditions such as obesity, metabolic syndrome and type 2 diabetes mellitus.

The aim of this study is to evaluate the relationship between Fetuin-A levels and clinical and metabolic parameters in postmenopausal women.

METHODS: This study included 80 postmenopausal women who admitted to the outpatient clinics of the Marmara University Faculty of Medicine, Department of Obstetrics and Gynecology, after obtaining written informed consent from all participants. All selected subjects had no systemic disease. Diagnosis of metabolic syndrome was made according to the International Diabetes Federation definition. Postmenopausal women were divided into two groups based on the presence of metabolic syndrome as MetS+ and MetS-. Clinical, metabolic parameters and Fetuin-A levels were compared between the two groups.

RESULTS: There was no statistically significant difference between the groups in terms of age, menopause duration, gravida, parity, body mass index, hemoglobin, LDL and total cholesterol levels. Comparison of group means showed significantly higher values for WHR, systolic and diastolic blood pressures, HOMA-IR, triglyceride levels in the MetS+ group. Fetuin-A level was 137.78 ± 114.26 ng/ml in the MetS+ group, while it was 91.55 ± 53.64 ng/ml in the MetS- group ($p<0.05$). HDL cholesterol was significantly higher in the MetS- group than the MetS+ one. There was no statistically significant difference between two groups in terms of bone mineral density.

CONCLUSION: Fetuin-A levels were significantly higher in the MetS+ group compared with the MetS- one in postmenopausal women.

Keywords: fetuin-a, menopause, metabolic syndrome, osteoporosis

Clinical and biochemical characteristics of study groups

	metabolic syndrome+ (N:33)	metabolic syndrome- (N:47)	P
age(year)	55,06±7,49	52,38±8,08	0,137
gravida	3,69±2,33	3,02±1,97	0,166
parity	3,15±1,92	2,70±1,86	0,268
body mass index (kg/m2)	29,11±3,20	27,56±4,00	0,068
waist hip ratio	0,88±0,06	0,81±0,06	<0,001**
total cholesterol (mg/dl)	229,45±39,39	224,21±38,52	0,555
LDL (mg/dl)	144,00±34,19	145,02±30,48	0,889
HDL (mg/dl)	51,60±12,80	59,53±12,69	0,008*
triglyceride (mg/dl)	171,27±82,44	97,38±33,73	<0,001**
systolic blood pressure (mm/hg)	143,36±16,76	123,91±17,67	<0,001**
diastolic blood pressure (mm/hg)	87,30±11,59	76,93±9,59	<0,001**
menopause duration (month)	95,09±103,09	87,57±74,47	0,706
hemoglobin level(g/dl)	13,37±1,14	13,30±0,81	0,759
HOMA-IR	3,70±1,76	2,14±1,18	<0,001**
fetuin A (ng/ml)	137,78±114,26	91,55±53,64	0,018*

* $p<0.05$ ** $p<0.01$

SS-070 [Jinekoloji Genel]

Evaluation of mammographic features in women with adenomyosisNezaket Kadioğlu¹, Ayçağ Yorgancı², Harika Göçer³, Şebnem Özayer², M. Kuntay Kokanalı², Yaprak Engin Üstün⁴¹Department of Obstetrics and Gynecology, Ankara Liv Hospital, Ankara Turkey²Department of Obstetrics and Gynecology, Ankara City Hospital, Ankara, Turkey³Hüma Obstetrics and Gynecology Hospital, Kayseri, Turkey⁴Etlik Zübeyde Hanım Women's Health Education and Research Hospital, Ankara, Turkey

BACKGROUND: We aimed to investigate the mammographic features in women with histopathologically proven adenomyosis to determine the relationship between adenomyosis and breast disease.

MATERIAL-METHODS: In this retrospective study, the histopathological records of women who had undergone a hysterectomy in Ankara Zekai Tahir Burak Women's Health Education and Research Center were reviewed. Patients who had clinically adenomyosis symptoms and histopathologically proven diagnosis of diffuse adenomyosis or adenomyoma were included in the study.

Histopathological reports showing focal adenomyosis, uterine leiomyoma > 1cm in hysterectomy specimen, and other premalignant and malignant uterine, cervical or ovarian pathologies were excluded.

Other exclusion criteria were patients with a history of local or systemic hormonal treatments due to adenomyosis symptoms, prior use of oral contraceptive pills, benign or malign breast disease, history of breast biopsy, treatment or operation due to endometriosis, and current smokers. Demographic and clinical characteristics of patients who had mammograms with/without breast ultrasound (USG) six months before or after the hysterectomy were included in the analysis. For the control group, women without any gynecologic complaints and with normal pelvic ultrasound were selected.

RESULTS: The demographic and clinical characteristics of the adenomyosis and the control groups are shown in Table 1. The adenomyosis group had higher breast density ($p=0.024$), more micro and macro calcifications ($p=0.001$), and higher BIRADS-mammography classification ($p<0.001$) than the control group. When patients who had low mammographic density (Density A - B, $n=80$) and high mammographic density (Density C - D, $n=60$) were compared, there were no statistically significant differences between the groups except the presence of adenomyosis (38.8% vs. 65%; $p=0.002$) (Table 2). When patients were compared according to the BIRADS 1 - 2 ($n=114$) and BIRADS 3 - 4 ($n=26$) categories, age ≥ 49.5 , gravidity ≥ 3 , parity ≥ 2 , and the presence of adenomyosis were statistically significantly higher in the BIRADS 3 - 4 group (Table 3). In the logistic regression analysis, the presence of adenomyosis was found to be the sole factor for BIRADS 3-4 category [OR 0.19 (95% CI: 0.055-0.636), $p=0.007$]

CONCLUSION: The results of our study suggested that patients with adenomyosis have an increased risk of higher mammographic breast density and BIRADS 3 classification. Breast density is a mammographic finding that is strongly associated with breast cancer risk. When the extremely dense breasts (Category D) were compared with the almost entirely fatty breasts (Category A), there is a 4.64-fold increase in the

risk of breast cancer for the extremely dense breasts. On the other hand, women with BIRADS 1 (negative) and 2 (benign findings) categories have the lowest risk of breast cancer, while BIRADS 3 (probably benign) category is still questionable as it means that the risk of malignancy is lower than 2%. In conclusion, the results of our study point out the importance of breast screening of women with adenomyosis. We hope that our study will lead to prospective studies that will investigate both the molecular history and clinical consequences of breast diseases in women with adenomyosis.

Keywords: BIRADS, breast density, mammography, uterine adenomyosis,

Table 1

	Adenomyosis group (n=70)	Control group (n=70)	P value
Age	49 (40-55)	47 (41-55)	0.012
Gravida	4 (0-8)	2 (0-10)	< 0.001
Parity	3 (0-6)	2 (0-7)	< 0.001
Abortus	0 (0-4)	0 (0-3)	0.13
D&C	0 (0-3)	0 (0-3)	0.05
BMI	30 (21-46)	30 (21-47)	0.9
Age of Menarche	13 (11-16)	13 (11-16)	0.53
Age at first birth	27 (17-35)	26 (17-35)	0.56
Uterine volume (cc)	177 (40-582)	N/A	N/A
Endometrial biopsy			
Benign	21 (30%)		
Endometrial polyp	23 (32.8%)	N/A	N/A
Endometrial hyperplasia w/o atypia	20 (28.6%)		
Endometrial hyperplasia w atypia	6 (8.6%)		

The demographic and clinical characteristics of the adenomyosis and the control group.

Table 2

	Density A-B N= 80	Density C-D N= 60	P-value
Age	48.5 (40-55)	48.5 (41-55)	0.358
Gravida	3 (0-10)	3 (0-7)	0.582
Parity	2 (0-7)	2 (0-6)	0.778
Abortus	0 (0-4)	0 (0-3)	0.170
D&C	0 (0-3)	0 (0-3)	0.908
BMI	30 (21-47)	29.5 (21-46)	0.189
Age of Menarche	13 (11-16)	13 (11-16)	0.643
Age at first birth	27 (17-35)	27 (17-35)	0.906
Adenomyosis			
No	49 (61.3%)	21 (35%)	0.002
Yes	31 (38.8%)	39 (65%)	

The demographic and clinical characteristics of patients according to the breast density categories.

Table 3

	BIRADS 1-2 N= 114	BIRADS 3-4 N= 26	P value
Age			0.013
< 49.5	78 (68.4%)	11 (42.3%)	
≥ 49.5	36 (31.6%)	15 (57.7%)	
Gravida			0.026
< 3	71 (62.3%)	10 (38.5%)	
≥ 3	43 (37.7%)	16 (61.5%)	
Parity			0.001
< 2	71 (62.3%)	7 (26.9%)	
≥ 2	43 (37.7%)	19 (73.1%)	
Abortus	0 (0-4)	0 (0-2)	0.354
D&C	0 (0-3)	0 (0-3)	0.558
BMI			0.76
< 30	52 (45.6%)	11 (42.3%)	
≥ 30	62 (54.4%)	15 (57.7%)	
Age of Menarche	13 (11-16)	13 (11-16)	0.987
Age at first birth	27 (17-35)	26.5 (18-33)	0.34
Adenomyosis			< 0.001
No	66 (57.9%)	4 (15.4%)	
Yes	48 (42.1%)	22 (84.6%)	

The demographic and clinical characteristics of patients according to the BIRADS stratification.

SS-071 [Jinekoloji Genel]

Evaluation of Vitamin D levels in Patients with Polycystic Ovary Syndrome and Uterine Leiomyomas

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OBJECTIVE: Uterine leiomyomas, the most common indication for hysterectomy, are the most common benign tumors in women of reproductive age. Although the growth of myomas is hormone dependent, the exact factors that trigger growth are still unknown. In addition to high morbidity and mortality associated with hysterectomy, the economic burden on the health system is tremendous. Therefore, the search for alternative treatment options and prevention techniques for fibroids carries great importance. Polycystic ovary syndrome (PCOS) is characterized by irregular menstruation and hyperandrogenism. Whether PCOS increases the risk of myomas is still unknown. Vitamin D plays an important role in cell proliferation, apoptosis, cell differentiation, maintenance of cell's biological functions, angiogenesis, production of extracellular matrix and immune response. Latest in vivo and in vitro studies have shown that vitamin D, as an anti-tumor agent, inhibits the growth of uterine fibroids. In this study, we aimed to evaluate the association between vitamin D and myoma development in the presence of PCOS by assessing the serum 25-hydroxyvitamin D3 (25(OH)D3) levels in patients with myoma and PCOS and by comparing these levels with healthy subjects. **PATIENTS AND METHODS:** This prospective case-control study was conducted at the department of obstetrics and gynecology of a tertiary referral center between December 2018 and September 2019. Total of 482 patients were included in this study. 270 patients of reproductive age diagnosed with uterine leiomyomas were included in the study group, and 212 healthy individuals without any uterine pathology were included in the control group. Serum (25(OH)D3) levels were measured using venous blood samples. 25(OH)D3 levels were determined by electrochemiluminescence (ECLIA) using the Elecsys 2010 automated analyzer (Roche Diagnostics, Mannheim, Germany). All patients were questioned for the presence of risk factors for vitamin D deficiency. Women with a history of adenomyosis, malignancy and myomectomy, postmenopausal women, pregnant and/or breastfeeding women, patients taking vitamin D supplements, patients with a history of miscarriage within the last 6 months and chronic and systemic diseases, patients using hormonal drugs during the 3 months before the start of the study were excluded.

RESULTS: The study group was further divided into two subgroups: 215 uterine leiomyoma patients without PCOS and 55 myoma patients with PCOS. The mean 25(OH)D3 level in each subgroup was calculated to be 20.9±9.9 ng/ml and 17.6±8.4 ng/ml, respectively. The mean 25(OH)D3 levels of each subgroup was compared to the control group, mean 25(OH)D3 level in the PCOS subgroup was found to be significantly low ($p<0.05$).

CONCLUSION: In this study, we observed women with PCOS and myomas had significantly low serum vitamin D levels. This indicated that both PCOS and vitamin D contribute to the pathophysiology of myomas. Although further studies are needed to drive a conclusion on the role of vitamin D in the development of leiomyomas, vitamin D

supplements can be useful in prevention of myomas especially in high-risk women such as women with PCOS.

Keywords: Vitamin D, Calcium, Uterine Leiomyoma, 25-hydroxyvitamin D3, Polycystic ovary syndrome

SS-072 [Jinekoloji Genel]

The rationality of appendectomy in gynecological surgeries

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GOAL: Appendectomy during gynecologic surgery is not performed routinely by most providers except in gynecologic cancer surgery. It has been reported in the literature that there may be a relationship between pelvic endometriosis and appendiceal carcinoid tumors. It is also known that Müllerian neoplasms with gastrointestinal phenotype can mimic gynecological malignancies. This study was performed to evaluate the rationality and feasibility of incidental appendectomy in a gynecologic and gynecologic oncology patient population.

METHODS: The records of gynecological surgeries performed in the last 2 years were reviewed. Patients who underwent additional appendectomy were identified and their information was retrospectively reviewed from computer database. Data were analyzed using descriptive statistics.

FINDINGS AND RESULTS: One hundred and eight patients were included in this study, 90 of them had malignant disease of gynecological origin. Eighteen patients had been operated for non-cancer reasons. The detected benign pathologies; leiomyoma in 5, endometriosis in 5, ovarian serous cyst adenoma in 4, endometrial intraepithelial neoplasia in 3, and mucinous neoplasm in 1. Detected malignant pathologies; 21 serous carcinoma, 1 malignant germ cell tumor, 39 endometrioid adenocarcinoma, 1 adenosarcoma, 4 borderline serous carcinoma, 4 clear cell carcinoma, 2 granulosa cell tumor, 1 neuroendocrine tumor, 1 endometrial stromal sarcoma, 2 endocervical adenocarcinoma, 4 cervical ca, 3 mucinous neoplasms, 1 borderline mucinous ca, 2 carcinosarcoma, 1 leiomyosarcoma, 2 adenosquamous ca, and 1 breast cancer recurrence-associated adenocarcinoma. Median age in patients with benign and malignant pathology was 49 years (range; 27-83 years) and 54.5 years (range; 17-76 years) respectively. There were no complications directly related to the appendectomy. In the pathological examination of the appendix, malignant pathology was detected in the appendix in 13 (12%) of 108 patients. Except for this, hyperplastic polyp was found in 1 patient and serrated adenoma with dysplastic change was detected in 1 patient. Eight patients had infiltrates of the appendix due to gynecological malignancy and all had serous carcinoma. One patient had metastatic breast cancer to the appendix. Primary appendiceal cancer was detected in 4 patients. Low grade mucinous neoplasm of appendix origin was detected in 1 patient. Incidental neuroendocrine tumor was found in 3 patients. All three patients with neuroendocrine tumors had gynecological malignancies. The gynecological malignancies of these patients; serous carcinoma in 1 patient, granulosa cell tumor in 1 patient, and endometrioid adenocarcinoma in 1 patient.

CONCLUSION: Incidental appendectomy procedure during gynecological surgery is a rational and feasible procedure and additional appendix pathologies can also be demonstrated. The association of gynecological cancers with neuroendocrine tumor of the appendix is remarkable. Further research is needed to determine this relationship.

Keywords: Appendectomy, cancer, gynecological surgery, neuroendocrine tumor,

SS-073 [Jinekoloji Genel]

Could oral antimicrobial peptides play a role in vaginal candidiasis?

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OBJECTIVE: *C. albicans* is a natural part of the human microbiome, and it colonizes the vaginal lumen without causing any symptoms. At least once in their life, 75% of all women have been infected with candida. This condition has a negative impact on women's social and sexual lives. Human immunity depends on antimicrobial peptides (AMPs) and these proteins fight germs, AMPs deficiency can lead to infections in human. We aimed to investigate the role of AMPs in vaginal candidiasis.

METHOD: AMPs have a crucial function in vaginal innate immunity. In vitro and in vivo research identified; Cathelicidin (LL-37), Secretory Leucocyte Proteinase Inhibitor (SLPI), Defensin, and Calprotectin to be highly effective against *Candida* species. On the other hand, Histatins (Hsts) are a prominent member of AMPs rich in histidine, bearing antifungal activity against *Candida* species. Hsts are low molecular peptides found in saliva and they are known to be a part of the human innate immune system. Several antifungal proteins have been found in the cervicovaginal fluid, but Hsts were not detected among them. However, Hst5 has been detected in the human serum. Efficacy of Hst5 was firstly demonstrated in a mouse model of vaginal candidia treatment.

RESULTS: As a defense strategy, vaginal AMPs are essential for *Candida* species virulence factors, lack of these proteins can lead to vaginal candidal infections. *Candida* species are killed by these peptides, which limit *Candida* species adherence to the vaginal wall, activate proteolytic enzymes, and increase metal binding activity. But, potent antifungal activity seen in Hst5 has not been observed in any other AMPs in humans, since it is associated with the amino acid sequence and is included within the Hst functional domain, making it unique. Also, Hst5 is a potent peptide because their proteolytic fragments called P-113 retain their anti-candidal activity and do not easily break. Hst5 causes potassium release, cell volume impairment, mitochondrial dysfunction via ATP efflux, and production of reactive oxygen species (ROS) in the intracellular medium. Hst5 binds to the metal as well. Hst5 stability against protease is improved by the presence of iron, copper, zinc, and nickel. The level of AMPs in vaginal or oral fluid may play a role in the development of vaginal candidal infections. However, current literature

is frequently related to vaginal AMPs.

CONCLUSION: Vaginal candidiasis is the most common vaginal infection in women's health, and low levels of oral innate AMPs may play a role in vaginal candidia etiopathogenesis. Also, these proteins may also be a future alternative to vaginal candidia treatment. Because, antifungal drug resistance generally occurs and this condition requires the research for novel treatments. While most investigations have focused on vaginal AMPs, oral AMPs must also be taken into account.

Keywords: anti microbial peptides, candida, histatin, oral, vaginal

SS-074 [İnfertilite]

The role of chronic endometritis in the etiopathogenesis of adenomyosis

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OBJECTIVE: Chronic endometritis (CE) refers to persistent local inflammation of the endometrium. The presence of plasma cells in endometrial stroma has been accepted as the gold standard criteria for establishing CE diagnosis. Adenomyosis is a disease caused by the invasion of endometrial stroma and glands into myometrial tissue. Recent studies show that microtrauma plays a role in the pathogenesis of adenomyosis and endometriosis. The present study aimed to investigate the possible relationship between chronic endometritis and adenomyosis using CD38 immunohistochemistry staining.

MATERIAL-METHOD: This study was conducted at Ankara University School of Medicine, Department of Obstetrics and Gynecology. Ankara University Scientific Research Projects Coordinatorship supported the study, and the pathology department completed immunohistochemistry examinations. Two groups of patients were identified for the study. The patients who underwent hysterectomy with a diagnosis of adenomyosis in their pathological examinations between 2010 and 2016 constituted the first group, while the patients without a diagnosis of adenomyosis were the second group. The patients with a history of any antibiotic or anti-inflammatory treatment for in last three months and with preneoplastic or neoplastic lesions were not included in the study. Among the identified patients, groups of 50 were formed by using the propensity score matching method and adenomyosis risk factors. The hysterectomy materials of the groups were achieved from the pathology archive, and the presence of plasma cells in the endometrial tissue and the thickness of the junctional zone layer was re-evaluated by CD38 immunohistochemistry staining. Demographic data of the patients were obtained from the hospital records.

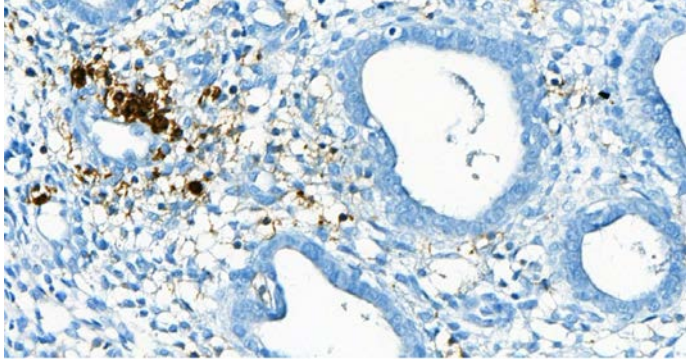
RESULTS: There was no significant difference between the groups for adenomyosis risk factors. The mean age of patients in the control group was significantly higher than the adenomyosis group (49.23±5.20, 45.32±5.35, p<0.001, respectively). In the re-evaluation of the pathology specimens of the patients, two main points were analyzed: The number of plasma cells in the endometrial tissue and the thickness in the junctional zone of the endometrium-myometrium. The mean plasma

cell count of patients in the adenomyosis group was significantly higher than the control group (3.32 ± 3.7 , 1.92 ± 1.74 , $p=0.018$, respectively). In addition, in the adenomyosis group, the mean diameter of junctional zone thickness was significantly thinner than the non-adenomyosis group (0.25 ± 0.09 , 0.30 ± 0.12 , $p=0.024$, respectively). Although the percentage of chronic endometritis was increased compared to the literature, there was no significant difference between the two groups for the presence of chronic endometritis (19(38%), 15(30%), $p=0.527$).

DISCUSSION: When the findings are evaluated with the current literature, chronic inflammation and microtrauma may play a role in the development of adenomyosis. However, no direct relationship was found with chronic endometritis in our study. Although a direct relationship can not be defined between chronic endometritis and the presence of adenomyosis, the presence of plasma cells in symptomatic patients may guide us. It can increase our medical treatment options. The findings need to be supported by further prospective observational studies.

Keywords: Chronic endometritis, Adenomyosis, plasma cell count, junctional zone

CD38 immunohistochemistry staining



The cells stained in dark color are defined as plasma cells

Comparison of histopathological findings

	Adenomyosis	Non-adenomyosis	P-value
Plasma cell count	3.32 ± 3.7	1.92 ± 1.74	0.018
Junctional zone thickness (mm)	0.25 ± 0.09	0.30 ± 0.12	0.024
Chronic endometritis	19(38)	15(30)	0.527

Continuous data are presented as mean \pm standard deviation and categorical data are presented as frequency (percentage). a The statistical significance stems from the differences between adenomyosis vs. control group ($P=0.018$).

SS-075 [Jinekoloji Genel]

Effects of Preoperative Anxiety on Vaginal Hysterectomy Pain and Analgesic Consumption: General versus Spinal Anesthesia

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OBJECTIVE: The aim of this study was to determine the effects of preoperative anxiety on the postoperative pain and analgesic consumption in patients undergoing vaginal hysterectomy (VH). **MATERIALS-METHODS:** This observational cohort study included 200 women, with ages ranging from 45–70 years old and received general (Group 1, $n=100$) or spinal (Group 2, $n=100$) anesthesia during an elective vaginal hysterectomy surgery. The State Anxiety Inventory (SAI), Trait Anxiety Inventory (TAI), and Somatosensory Amplification Scale (SSAS) were used to measure the preoperative anxiety. The postoperative pain intensity was evaluated using the Visual Analogue Scale (VAS), and the pain and analgesic requirements were recorded at the 1st, 6th, 12th, 18th, and 24th postoperative hours. **RESULTS:** There were no differences in the demographics, clinical characteristics, or laboratory parameters between the groups. In addition, No statistically significant differences were found between the groups with regard to the mean SAI, TAI, and SSAS scores and the diclofenac and pethidine consumptions ($p>0.05$). The 1st hour [4.11 ± 1.81 vs. 3.17 ± 1.93 , odds ratio (OR) = 0.767, 95% confidence interval (CI) = 0.659–0.894, $p<0.001$], 6th hour (3.79 ± 1.95 vs. 2.81 ± 1.53 , OR=0.706, 95% CI=0.591–0.843, $p<0.001$), 12th hour (3.59 ± 2.04 vs. 2.53 ± 1.64 , OR=0.737, 95% CI=0.629–0.863, $p<0.001$), and 18th hour (3.01 ± 1.06 vs. 2.46 ± 1.58 , OR=0.797, 95% CI=0.6661–0.961, $p=0.015$) VAS scores were lower in Group 2 than in Group 1. No correlations were noted between the SAI, TAI, and SSAS scores and the VAS. **Conclusion(s):** While the patients with preoperative SAI scores > 45 and who underwent VHs with general anesthesia had higher pain intensity scores in the first 18 hours than those underwent VHs with the spinal anesthesia, no difference was observed between the groups in terms of the postoperative analgesic requirements. Evaluating the patient's anxiety state and psychiatric evaluation may be useful for decreasing the postoperative pain intensity. Further studies are needed to corroborate our findings.

Keywords: anxiety, vaginal hysterectomy, general anesthesia, pain, spinal anesthesia

Table 1. Demographic, clinical, laboratory parameters, anxiety scores, and analgesic consumptions of the study participants and pain intensity measurements of the patients in the first 24 postoperative hours.

	General Anesthesia (Group 1) (n=100)	Spinal Anesthesia (Group 2) (n=100)	Odds Ratio	95% Confidence Interval	p
Age (years)	56.31+7.19	57.45 + 6.29	-	-	0.175
BMI (kg/m ²)	25.62 + 2.28		-	-	0.308
Meno-metroragia resistant to medical treatment	55%	47%	-	-	
Cronic pelvic pain	8%	5%	-	-	0.548
Uterovaginal prolapse	37%	58%	-	-	
Operation time (minutes)	3.39 + 11.18	71.36 + 11.02	-	-	0.198
Preoperative Hb (gr/L)	11.78 + 1.85	12.03 + 1.75	-	-	0.345
Postoperative Hb (gr/L)	10.28 + 1.81	10.53 + 1.77	-	-	0.305
Blood loss (ml)	232.69+83.08	216.60+58.26	-	-	0.114
Hospital stay (days)	2.68+0.76	2.51+0.68	-	-	0.101
Analgesic needs (days)	3.87+1.10	3.62+1.06	-	-	0.105
Alanine aminotransferase (U/L)	21.99+8.85	20.49+7.26	-	-	0.192
Aspartate aminotransferase (U/L)	23.88+8.29	22.70+7.95	-	-	0.359
Serum cholinesterase (U/mL)	8.01+5.17	7.25+4.53	-	-	0.304
Urea (mg/dL)	15.13+7.02	13.99+5.50	-	-	0.203
Primary school	54%	56%	-	-	0.369
Secondary school	24%	31%	-	-	0.175
University	22%	13%	-	-	
Mean State Anxiety Inventory score	40.02+8.81	38.56+9.13	-	-	0.252
Mean Trait Anxiety Inventory score	43.96+7.10	42.49+7.22	-	-	0.148
Somato-sensory Amplification Scale score	31.46+6.76	29.97+7.02	-	-	0.128
Diclofenac consumption (mg)	108.75+51.53	117.75+44.28	-	-	0.187
Pethidine consumption (mg)	23.00+15.11	20.50+15.60	-	-	0.618
State Anxiety Inventory score >45 (%)	32%	30%	-	-	0.414
VAS 1 h	4.11+1.81	3.17+1.93	0.767	0.659-0.894	<0.001*
VAS 6 h	3.79+1.95	2.81+1.53	0.706	0.591-0.843	<0.001*
VAS 12 h	3.59+2.04	2.53+1.64	0.737	0.629-0.863	<0.001*
VAS 18 h	3.01+1.55	2.46+1.58	0.797	0.661-0.961	<0.015*
VAS 24 h	2.18+1.06	2.31+1.42	1.190	0.932-1.520	0.361

BMI: Body Mass Index, VAS: Visual analog scale, * Statistically significant

Table 2. Comparison of analgesic consumption and pain intensity in the patients with and without a State Anxiety Index score of ≥ 45 .

	State Anxiety Inventory Score <45			State Anxiety Inventory Score ≥ 45		
	General Anesthesia (Group 1) (n=68)	Spinal Anesthesia (Group 2) (n=70)	p	General Anesthesia (Group 1) (n=32)	Spinal Anesthesia (Group 2) (n=30)	p
Diclofenac consumption (mg)	118.01+43.59	110.36+43.71	0.305	117.19+46.41	105.00+67.08	0.406
Pethidine consumption (mg)	22.14+16.74	16.91+11.87	0.374	28.13+12.01	25.00+11.48	0.741
VAS 1 h	4.01+1.82	3.62+2.16	0.161	4.36+1.80	3.04+2.13	<0.001*
VAS 6 h	3.64+2.01	3.17+1.45	0.101	4.13+1.77	2.78+1.36	<0.001*
VAS 12 h	3.60+2.03	3.05+1.85	0.216	3.57+2.09	2.49+1.81	<0.001*
VAS 18 h	3.01+1.46	2.82+1.37	0.359	2.97+1.71	2.03+1.04	<0.001*
VAS 24 h	2.31+1.09	2.06+1.05	0.412	2.17+1.93	1.89+0.93	0.216

VAS: Visual analog scale, * Statistically significant

SS-076 [Jinekoloji Genel]

Oophoropexy-resistant recurrent non-cystic ovarian torsion in an adolescent: a case report

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AIM: Ovarian torsion (OT) is one of the gynaecological emergencies that can be encountered in every period of woman's life cycle. The recurrence rate significantly increases after treatment of normal adnexa by detorsion, particularly in cases that develop under the age of 15 or in the premenarchal period. Here we report a case with normal adnexa that was complicated by four OT episodes in 9 months despite oophoropexies.

METHODS: A case report.

RESULTS: An 18-year-old patient applied with the complaint of sudden onset right lower abdominal pain. Her anamnesis was uneventful. Defence, rebound and an increased right ovarian size were found on her examination. Laparotomy was performed, and right OT was observed. Detorsion and oophoropexy to the posterior uterine wall with an absorbable suture were performed. Four months later, the second torsion attack occurred. By the laparotomy, torsion of the left ovary was demonstrated. However, there was no finding that belongs to the previous right oophoropexy procedure. The left ovarian detorsion and bilateral oophoropexies were performed by fixing ovaries to the posterior uterine wall with absorbable sutures. Two months later, the third torsion attack happened. Right OT was uncovered at the laparotomy. No signs of prior oophoropexies were found. A right salpingo-oophorectomy was performed due to the suspicion of necrosis. Nevertheless, there was no necrosis in the histopathological examination. Two months later, the patient reapplied with lower abdominal pain. It was learned that the patient had an oocyte pick-up procedure two days before. There was no defence or rebound on her examination. Ultrasonography showed multiple follicle cysts and an increased left ovarian size of 120.75 mm with the apparent flow of ovarian vessels. The patient was administered medically on account of primarily considering ovarian hyperstimulation syndrome. Three weeks later, the patient presented again with sudden onset left lower abdominal pain. An emergency laparotomy was decided because of acute abdomen presence. Bladder perforation occurred during abdominal entry, and the left ovary was encountered to be 1440 degrees of torsion. An oophoropexy that contains fixation of the left ovary to the left uterosacral ligament and the posterior uterine wall together with plication of the left utero-ovarian ligament with nonabsorbable sutures in addition to detorsion was performed, and the bladder was repaired. No other torsion episode became in the patient for three months and oral contraceptive treatment was admitted. CONCLUSION: In patients with normal adnexa, detorsion and preservation of the adnexal structures regardless of the appearance of the ovary are recommended. Moreover, it should be taken into account that the oophoropexy procedure with an absorbable suture implemented at the same time with detorsion may fail, and the option of performing emergent or elective oophoropexy with nonabsorbable sutures should be offered to the patients as a part of the management while counselling with this patient group.

Keywords: gynaecological emergency, oophoropexy, recurrent ovarian torsion, torsion of normal adnexa

SS-077 [Perinatoloji]**Does in vitro fertilization pregnancies affect first trimester screening test?**

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AIM: The combined test is the most comprehensive method for early screening of major chromosomal abnormalities in the first trimester of pregnancy. This test makes the risk calculation using NT, HCG, and PAPP. In this study, we aimed to evaluate the effects of in vitro fertilization (IVF) pregnancies on these parameters. **METHODS:** This retrospective study was conducted between 2015 and 2020. The study group consisted of IVF pregnancies with single embryo transfer, which used intravaginal progesterone 180mg/day until the 12th gestational week. The control group consisted of spontaneous pregnancies which did not receive any progesterone preparations in the first trimester of pregnancy. All the pregnant women used similar vitamins, and these drugs were not analyzed in the study. Patients whose NT thickness was greater than 3 mm and chromosomal abnormality due to the invasive procedure and who had systemic disorders were excluded. Multiple pregnancies and patients who bleed in the first trimester were also excluded. All statistical analyses were performed using the SPSS for Windows 25 software program. In the comparison of two independent groups, Student-t-Test was used to evaluate the variables showing normal distribution. The significance level was set at $p=0.05$. **RESULTS:** 7427 patients were in the study group, and 437 patients were in the control group. The age and HCG MoM values were higher in the study group; the difference between the groups was found statistically significant ($p=0.00$). PAPP-A MoM and NT MoM values were similar between the two groups, and there was no statistically significant difference (respectively, $p=0.08$, $p=0.120$). **DISCUSSION:** In a study by Giorgione in 2015, the authors argued that progesterone changes the blood flow pattern and may be the reason for the increase in NT thickness. However, there was no difference in NT thickness between the groups in our study, whether IVF pregnancies received progesterone treatment. As the mean age was higher in the study group, we think there were more advanced age patients in the IVF group. It is not clear how IVF affects HCG values in the first trimester. If the risk of trisomy 21 is high in the first-trimester screening test, it should be questioned whether this pregnancy is an IVF pregnancy.

Keywords: first trimester screening test, hcg, ivf, papp-a

SS-078 [Perinatoloji]**Examination of Fetal Heart in the First and Second Trimester: Results and Limitations**

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OBJECTIVE: To assess the efficacy and technical limitations of first trimester fetal heart evaluation in the 11-14th weeks scan and comparison with second trimester anatomical exam by ultrasound

MATERIALS-METHOD: Between the April 2015 and July 2020 medical records and ultrasound data of 3295 pregnancies who underwent first trimester fetal anatomy exam by ultrasound were reviewed retrospectively. All ultrasound exams were performed by the same two operators (TUKD, OP) with transabdominal technique. Fetal situs, four chamber view, outflow tracts and three-vessel trachea view are the cornerstones of first trimester fetal heart examination. Conventional grayscale mode and high definition power Doppler mode were utilized. All cases were re-examined by the same operators between the 18 and 23 weeks' of gestation by ISUOG guideline..

RESULTS: We performed a combined transvaginal and transabdominal approach for only 101 cases (3,06 %). Mean maternal age was $31,28 \pm 4,43$, Median gestational age at first trimester ultrasound exam was 12,4 weeks and median CRL was 61,87 mm (Range was 45,1-84 mm). Even combined approach situs, cardiac axis and four chamber view could not be visualized optimally in 28 cases (0,7 %). Outflow tracts visualized separately in 80 % (2636 in 3295) of cases. Three vessel-trachea views obtained in 85,4 % (2814 in 3295) of cases by high definition Doppler mode. There were 48 fetuses with cardiac defects in 3295 pregnancies with the known pregnancy outcome. 10 cases had abnormal karyotype results. 31 fetuses with cardiac anomalies (9,4 in 1000 pregnancies) were detected in the first trimester examination and remaining 17 (5,1 in 1000 pregnancies) cases were diagnosed in the second trimester examination. Prevalence of congenital cardiac anomalies was 14,5 in 1000 pregnancies. Seventeen cases were missed in the first trimester exam. Also 10 fetuses which had abnormal cardiac findings in the first trimester exam were not confirmed in the second trimester exam. Sensitivity, specificity, positive predictive value and negative predictive value were calculated as 65,3 %, 99,7 %, 66,8 % and, 99,67 % respectively.

DISCUSSION: Late first trimester examination of fetus is feasible and seems to allow earlier detection of many structural abnormalities of fetus including congenital heart defects. Suspicious and isolated cardiac abnormal findings should be re-examined and confirmed in the second trimester exam. Previous abdominal surgery, high BMI and subtle cardiac defects can cause missed cardiac abnormalities.

Keywords: Fetal heart, first trimester exam, high definition Doppler, second trimester exam, cardiac anatomy

SS-079 [Perinatoloji]

Fetoscopic Laser Coagulation for Twin-to-twin Transfusion Syndrome, Results of a High-Volume Center

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Objectives: Twin-to-twin transfusion syndrome (TTTS) is one of the major complications of monochorionic twin pregnancies. Laser therapy has been used as the most promising treatment option for the last 30 years. We aim to reveal the results of our clinic on fetoscopic laser coagulation for TTTS performed between January 2020 and March 2022.

Methods: We performed the procedure in mid-second trimester under general anesthesia via a single 3-mm port with the ultrasound guidance. By mapping the location of placenta with the ultrasound, we position our port and coagulate the anastomoses between donor and receiver twin with a systematic approach throughout the placenta.

Results: We performed the procedure to 18 patients at the mean of 19th week of gestation with various grades of TTTS, 50% of which was grade 2. Two patients (11%) had grade 4 TTTS. The mean survival of both twins is 68% and for at least one twin is %87 which is comparable with the literature. Mean gestational age at birth is calculated as 32 weeks.

Discussion: Laser coagulation provided a major improvement in perinatal survival of monochorionic pregnancies in the last 30 years. With the help of enhanced neonatal care in experienced centers, we can further increase the survival by the help of the improvements in laser technique and better referral.

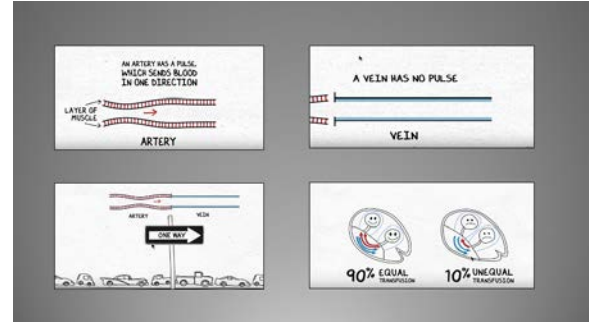
Keywords: fetoscopy, laser coagulation, monochorionic pregnancy, twin to twin transfusion

A monochorionic placenta



We observe and ligate the arteriovenous anastomoses in a monochorionic placenta

TTTS Mechanism



Arteriovenous anastomoses result in a one-way circulation causing uneven blood supply to twins

SS-080 [Obstetri Genel]

Clinical importance of serum BDNF level for the management of the pregnancies complicated with meconium-stained amniotic fluid

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BACKGROUND-AIM: We aimed to investigate the association between poor neonatal outcomes and BDNF levels to predict the need for an emergency cesarean, and prevent unnecessary interventions in cases complicated with meconium-stained amniotic fluid.

MATERIALS-METHODS: This study was designed as a prospective study including three groups. Group A included 74 pregnant women who underwent to caesarean due to fetal distress. The second group included 40 pregnant women who delivered vaginally. First and second groups included the cases with the absence of meconium in the amniotic fluid. The third group included 62 pregnant women with clear amniotic fluid. Demographic features, fetal outcomes, and maternal serum BDNF levels were calculated.

RESULTS: The study included one hundred seventy-six pregnant women. Group A included seventy-four cases, while Group B included forty and Group C contained sixty-two pregnant women. We found no significant difference between patients with meconium and without meconium in terms of BDNF levels. However, the level of BDNF was found significantly lower, if the fetal stress has occurred with MSAF.

CONCLUSIONS: In conclusion, the study demonstrated that the level of BDNF is significantly lower when fetal stress occurs with the presence of MSAF.

Keywords: BDNF, Fetal distress, Meconium, Neurotrophins

SS-084 [Perinatoloji]

A case report: isolated interrupted inferior vena cava with azygos continuation to superior vena cavaMerve Sezer Yıldırım İnkanaya¹, Gözde Zeynep Demir¹, Sezgi Güllü Erciyestepe², Alev Atış Aydın³, Zülat Acar⁴¹Sarıyer Hamidiye Etfal Eğitim ve Araştırma Hastanesi, Kadın Hastalıkları ve Doğum Ana Bilim Dalı, İstanbul²Edirne Keşan Devlet Hastahanesi, Kadın Hastalıkları ve Doğum Ana Bilim Dalı, Edirne³Sarıyer Hamidiye Etfal Eğitim ve Araştırma Hastanesi, Perinatoloji, İstanbul⁴BHT Klinik, Perinatoloji, İstanbul

Absence of the inferior vena cava is a rare congenital abnormality. Its prevalence is about 0.2-3%. It is often associated with other structural anomalies, typically left isomerism. We will be sharing with you a case of azygos continuous interrupted vena cava inferior, which was diagnosed as an isolated finding during routine prenatal ultrasound scanning in our tertiary center and confirmed by postnatal echocardiography. Gravida 2 parity 1 (normal spontaneous birth), 27 weeks and 6 days old pregnant woman according to her last menstrual period, applied to our clinic for routine control. It was learned that the age risk of the patient, who did not have a chronic disease, was 1/31 in the second trimester screening test. Genetic counseling and fetal cell free dna test were recommended to the patient, but the patient stated that she did not want to have it done. In the ultrasound, it was observed that the amniotic fluid was sufficient and the placenta was intact, and the fetal biometry is consistent with last menstrual date measurement. The presence of a vessel behind the descending aorta was observed with the appearance of large vessel outlets and 3-vessel trachea. Superior vena cava was observed to be enlarged and prominent. In the bicaval view, it was seen that the intrahepatic part of the inferior vena cava was interrupted. Interrupted vena cava inferior was observed as a continuous azygous. No additional anomaly was detected in the ultrasound performed in the patient who came to his routine controls. According to her last menstrual period, when she was 37 weeks and 4 days old, the patient admitted with the complaint of inguinal pain, and a mediolateral episiotomy was opened under vaginal route and local anesthesia, and she gave birth to a live female baby with a weight of 2815 g, 49 cm in length, and APGAR 1 minute 9 5 minutes 10. No clinical features were found in the cardiac examination performed after birth. In the detailed cardiac evaluation performed in the 1st month after birth, the ECG was unremarkable and showed normal atrioventricular conduction and sinus rhythm. Echocardiography confirmed the prenatal diagnosis of azygos continuous inferior vena cava. No other cardiac/extracardiac abnormality was detected. Follow-up and periodic follow-up was recommended for the development of any rhythm anomaly in the future. The unique aspect of this case is the diagnosis of an isolated interrupted inferior vena cava persisting with azygos by fetal echocardiography. Most previous cases of isolated interrupted vena cava inferior are diagnosed in adulthood. We think that the bicaval view is extremely useful in demonstrating this anomaly, together with showing the azygos continuation of the superior vena cava. Parents should be informed about the possibility of developing sick sinus syndrome and an increased risk of venous thrombosis in the postnatal period for this vascular anomaly. Careful investigation and postnatal evaluation and follow-up for other structural anomalies are therefore mandatory.

Keywords: azygos, bicaval view, inferior vena cava, superior vena cava**interrupted vena cava inferior****interrupted vena cava inferior 2**

SS-085 [Perinatoloji]

**Comprehensive Diagnosis of A Rare
Congenital Anomaly: Thoraco-
Omphalopagus**

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Dichorionic births are quite common in spontaneous twin pregnancies, but monozygotic twinning is rare. Fusion that occurs in the early stages of the fetal division stage can cause both chorionic and fetal anomalies in a wide spectrum. Diagnosis of fetal anomalies in twin pregnancies is difficult and limited by second trimester prolapse abdominal sonogram. A 26-year-old multigravid mother who applied to our clinic was evaluated in her first examination. The mother, who had no medical or family history, had spontaneously achieved her pregnancy. A monozygotic monoamniotic twin pregnancy was detected and it was found that she carried a thoraco-omphalopagus conjoined twin conceptus. Fetuses were at 12 weeks of gestation. Thorax fusion contained a single cardiac structure and common development, and abdominal fusion revealed a common liver usage. Pregnancy abortion options were discussed with the family and the family accepted the evacuation. Spontaneous abortion occurred after misoprostol induction and skin biopsies of fetuses were taken for genetic evaluation. In the pathological evaluation, a female twin fetus weighing 24 g, conjoined and with the same measurements, head circumference of 8 cm, chest circumference of 6 cm, abdominal circumference of 7.5 cm, and head-rump distance of 5.5 cm, was observed. It was observed that the fetuses were conjoint from the thoracic region and the fusion ended just above the umbilicus. No anomaly was observed in the extremities of the fetuses. Cleft palate anomaly was observed in one fetus and the other fetus had agenesis in the right lung. The genetic result came as "Chromosome analysis could not be performed because the appropriate metaphase could not be found". The family was referred to genetic counseling. It is known that congenital fusion anomalies progress with multiple organ anomalies (neural tube defects, facial anomalies, diaphragmatic anomalies), it is important to perform genetic evaluation correctly in tertiary center. It should be kept in mind that the other half of the perinatal evaluation is the genetic laboratory.

Keywords: Twin Pregnancy, Thoraco-Omphalopagus, Perinatal Evaluation

Abortion View

Photo after abortion

Ultrasound View

Sonographic evaluation view

SS-086 [Perinatoloji]

A rare case report associated with FADS syndrome: Mutation in the NEB gene

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BACKGROUND: Fetal akinesia deformation sequence(FADS) is a broad spectrum disorder with absent fetal movements as the unifying feature. The etiology of FADS is heterogeneous and mostly still unknown. Nebulin is a giant protein that is an integral component of the skeletal muscle. The nebulin gene(NEB) with its 183 exons, encodes one of the biggest proteins in vertebrates. It is believed that it is a major player in muscle health and disease. Mutations in the NEB gene cause some cases of the autosomal recessive disorder nebuline myopathy and FADS. Here, we aimed to report a case with fetal akinesia deformation sequence with suspicion a mutation in the NEB(nebulin) gene at fetus. The fetus was terminated.

CASE SUMMARY: Our case with 32-year old, gravida 4, para 1, abortus 2 with first degree consanguineous marriage at 13 weeks of pregnancy was referred to our clinic because of bad obstetric history of termination in two consecutive pregnancies with suspicion of FADS. Our case was the mother's 4th pregnancy after the first healthy child and the next two terminated fetus. On ultrasonographic examination at 13 weeks of pregnancy, NT(nuchal translucency) was measured as 6.1 mm diameter and fetal movements were not observed and lower extremities were viewed crosswise from the knee. In addition, micrognathia, pes equinovarus and flexion contracture in the extremities were observed during ultrasound follow-ups. Fetal growth was not appropriate for the gestational age and a clinical diagnosis of FADS was made. Termination choice according to ultrasonographic findings was presented. Family accepted the termination option and the pregnancy was terminated at 17 weeks of gestation. The homozygous variant of uncertain clinical significance in the NEB gene was detected by WES(whole exome sequencing) analysis in the postnatally genetic examination of the fetus in the previous terminated pregnancy. In all available data, this suggests that pregnancy is an autosomal recessive inherited gene defect. This variant which was revealed as a result of advanced molecular testing from previous miscarriage can not be said to be the definitive cause with these data. The family was informed that the exact genetic etiology could not be revealed in the prenatal period. Genetic counseling was given to the family. After termination genetic examination revealed NEB gene mutation as in the previous pregnancy.

CONCLUSION: In conclusion, we herein reported a case of homozygous variant mutation of NEB gene that caused FADS. Further investigation of the relationship between the phenotype and genotype of this gene mutation will enable a better understanding of this rare disease.

Keywords: Fetal akinesia deformation sequence, Nebulin gene, Prenatal diagnosis

Postnatal photos of fetus



Figure 4

Postnatal photos of fetus



Figure 3

Prenatal views of fetus



Figure 2

Prenatal views of fetus



Figure 1

SS-087 [Infertilite]

Follicular Volume Predicts Oocyte Maturity: A Retrospective Study Using Three-Dimensional Ultrasound and SonoAVC

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AIM: Sonography-based automated volume count is a newly developed software program that identifies and quantifies the hypoechogenic follicles and provides an estimate of their volume and absolute dimensions. We aimed to establish cutoff values for follicular volume to increase the production of mature oocytes and pregnancy rates.

METHODS: A retrospective study was performed between March 1, 2019 and May 31, 2019 at the Etlik Zübeyde Hanım Women's Health

Training Hospital IVF Clinic. Ninety five women undergoing ovulation induction for IVF were enrolled in the study. During ovarian stimulation, follicular monitoring was first performed by conventional 2D ultrasound. Once 3 or more follicles had reached a mean diameter of at least 18 mm, Sono AVC was used to acquire volume data sets and each individual follicle was recognized as a hypoechogenic volume. The volume of each follicle, the average diameter and the largest diameter in 3 orthogonal planes per follicle were determined by the software. As a follicle shape is rarely an ideal sphere, the follicle's measured volume was used to calculate the diameter of the ideal sphere (volume diameter). Following our standard protocol, the clinical decision to administer hCG was based on manual measurements in all cases and hCG was administered. For each patient, we counted the number of follicles in each of the following volume classes: >4cm³, 2.00 to 3.99 cm³, 1.00 to 1.99 cm³, 0.50 to 0.99 cm³, <0.49 cm³.

RESULTS: Ninety-five patients were included in the analysis. The mean count of mature oocytes retrieved was 6.68 ± 4.71 with a 68.7% maturity rate. The fertilization rate of M2 oocytes was 50%. The counts of follicles in the class of volume 1.00-1.99 cm³ was significant predictors of the count of mature oocytes. A moderate and positive correlation was found between the counts of follicles in the class of volume 1.00-1.99 cm³ and 2.00-3.99 cm³ and the count of mature oocytes ($r=0.323$ and $r=0.228$; $P=0.002$ and $P=0.028$ respectively), on the other hand, the counts of follicles in the classes of volume <0.49 cm³ and 0.49-0.99 cm³ showed weak correlation in terms of mature oocyte ($r=0.293$ and $r=0.204$; $P=0.004$ and $P=0.050$ respectively). When SonoAVC -dv measurements were taken into consideration, indicating the conversion of volume to the diameter a perfect sphere, there is a moderate but very significant correlation between 1.00-1.49 and 15.0-1.99 cm Sono AVC-dv classes and mature oocyte ($r=0.356$; $p=0.001$ and $r=0.256$; $p=0.041$ respectively). >2.0 cm SonoAVC diameter has a weaker association with the number of mature oocytes, reflecting an undesired postmature state ($r=0.082$; $p=0.404$). If stimulation protocols are examined separately, Spearman correlation analyses showed that a moderate and positive correlation was found between the counts of follicles in the class of volume 1.00-1.99 cm³ and the count of mature oocytes ($r=0.468$; $p=0.002$) in antagonist protocol.

CONCLUSION: Volume measurement by Sono AVC minimize the intra and interobserver variation and provide standartization of follicle measurements. SonoAVC ultrasound may be very useful especially in the case of hyperstimulated ovaries which have predominantly ellipsoid follicular shape.

Keywords: In vitro fertilization, oocyte maturity, sonoAVC, follicular volume

Follicles in the different volume classes at hCG day

Follicle volume	mean \pm sd
<0.49 cm ³	8.2421 \pm 5.09
0.49-0.99 cm ³	2.7684 \pm 1.66
1.00-1.99 cm ³	3.7158 \pm 2.50
2.00-3.99 cm ³	2.1158 \pm 1.59
>4 cm ³	0.6105 \pm 0.82
Sono AVC dv	mean \pm sd
1.00-1.49 cm	5.25 \pm 3.40
1.50-1.99 cm	2.91 \pm 1.89
>2 cm	0.56 \pm 0.79

*Sono AVC: Sonography-based automated volume count; sd: standard deviation; hCG: human chorionic gonadotropin; ** volume calculated with Sono AVC

Prediction model of the count of mature oocytes

Follicle Sono AVC volume	Estimated main diameter for the volume of sphere1	beta coefficient2	P
<0.49 cm3	<0.977 cm	0.100	0.469
0.49-0.99 cm3	0.983-1.235 cm	0.087	0.408
1.00-1.99 cm3	1.241-1.417 cm	0.351	0.002
2.00-3.99 cm3	1.563-1.965 cm	0.392	0.029
>4 cm3	>1.967cm	-0.072	0.524

Adjusted R²:0.232 1Obtained by transformation from the formula: volume of a sphere $\frac{4}{3}\pi(D/2)^3$. 2The coefficient measures the increase in the count of mature oocytes for a 1 unit increase in the predictor.

Spearman correlation analysis between follicle volume and mature oocytes

Follicle volume**	r	P-value
<0.49 cm3	0.293	0.004*
0.49-0.99 cm3	0.204	0.050*
1.00-1.99 cm3	0.323	0.002*
2.00-3.99 cm3	0.228	0.028*
>4 cm3	0.085	0.420
#Sono AVC dv		
1.00-1.49cm	0.256	0.041*
1.50-1.99cm	0.365	0.001*
>2cm	0.181	0.082

** volume calculated with Sono AVC; *:P-values with statistical significance ($P < 0.05$). #Sono AVC: Sonography-based automated volume count

SS-088 [İnfertilite]

Impact of estrogen replacement regime on reproductive outcomes in artificial frozen thawed embryo transfer cycles

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Objective: Recent advances in assisted reproductive technologies (ART) have allowed utilization of vitrification and thawed embryo transfer (ET) much more following in vitro fertilization/intracytoplasmic sperm injection (IVF/ICSI) treatment cycles. Even though FET in a true- or modified-natural cycle has become popular during the last decade, endometrial preparation in an artificial cycle with hormone replacement therapy (HRT) is still advantageous for anovulatory women and in oocyte donation programs, as well as timing benefits for daily practice in both ovulatory and anovulatory women. However, no previous studies have compared different step-up regimes with the fixed-dose regime. The aim of the present study was to compare three different estrogen replacement regimes in HRT-FET cycles: a step-up regime starting from 2 mg, a step-up regime starting from 4 mg, and a fixed-

dose regime (6 mg).

Materials and methods: In this single-center cohort study, HRT-FET cycles performed at the Infertility Center, Ankara University Cebeci Hospital, between May 2013 and December 2020 were retrospectively reviewed. The inclusion criteria were artificial endometrial preparation with oral estradiol hemihydrate, age between 20-42 years, transfer of good quality embryos. The exclusion criteria were the transfer of low-quality embryos and <8 days of estrogen replacement. The first study group (Step-up 2 mg) consisted of women who received 2 mg estradiol hemihydrate once daily for 6-7 days, then twice daily for 4-5 days, and then three times a day until ET. The second study group (Step-up 4 mg) consisted of women who received 2 mg estradiol hemihydrate twice daily for 7-8 days and then three times a day until ET. The third study group (Fixed 6 mg) consisted of women who constantly received 2 mg estradiol hemihydrate three times a day until ET. The primary outcome measure was the live birth rate. Secondary outcome measures were clinical pregnancy and cycle cancellation rates.

Result(s): Among 618 FET cycles assessed for eligibility, 394 were included. There were 158 cycles (40.1%) in the first group, 134 cycles (34%) in the second group, and 102 cycles (25.9%) in the third group. There were no statistically significant differences between the groups regarding baseline characteristics. The fixed 6 mg group required the highest estradiol hemihydrate dose. The duration of estrogen treatment was significantly longer in the step-up 2 mg group. The maximal endometrial thickness at the end of the estrogen phase was highest in the step-up 4 mg group (10.2±1.3 mm vs. 9.6±1.4 mm vs. 8.6±0.9 mm; $P<0.001$). The clinical pregnancy rates in the groups were 41.1%, 55.2%, and 42.2%, respectively ($P=0.035$). The cycle cancellation rates due to premature progesterone rise were similar between the groups. The live birth rates per ET were 37.9%, 46.2%, and 38.2%, respectively ($P=0.300$). The live birth rates per blastocyst transfer were 40.8%, 50.9%, and 48.1%, respectively ($P=0.320$).

Conclusion(s): In hormone replacement therapy, FET cycles step-up 4 mg regime provides thicker endometrium with optimal dose estrogen in an adequate time frame. The tendency for increased clinical pregnancy and live birth rates in the step-up 4mg regime is remarkable and may have clinical significance.

Keywords: Endometrial preparation, endometrial thickness, estrogen replacement, frozen-thawed embryo transfer, in vitro fertilization

Comparison of the demographic and cycle parameters

	Step-up 2 mg (n=158)	Step-up 4 mg (n=134)	Fixed 6 mg (n=102)	P
Age, years	30.7±4.9	31±5.8	29.3±3.1	0.116
BMI, kg/m ²	26.1±3.9	26.1±4.1	25.4±3.7	0.252
Smoking, n (%)	15 (9.5)	15 (11.2)	11 (10.8)	0.884
Etiology of infertility, n (%)				0.403
- Male factor	36 (22.8)	25 (18.7)	26 (25.5)	
- Female factor	46 (29.1)	40 (29.9)	22 (21.6)	
- Male+female factor	34 (21.5)	37 (27.6)	21 (20.5)	
- Unexplained	42 (26.6)	32 (23.8)	33 (32.4)	
Previous IU surgery, n (%)	19 (12)	11 (8.2)	13 (12.7)	0.458
Total estrogen dose, mg	53.9±14.4	63.1±27.7	77.7±30	<0.001 a
Duration of estrogen, days	15.2±2.5	12.2±2.8	12.8±4.2	<0.001 b
Maximal EMT, mm	9.6±1.4	10.2±1.3	8.6±0.9	<0.001 c
EMT on ET day, mm	10±1.6	9.8±1	9.3±1.5	0.002 d
Transferred embryos, n	1.2±0.4	1.3±0.4	1.2±0.4	0.314
Embryo stage, n (%)				<0.001
Cleavage	50 (32.7)	20 (15.2)	50 (49)	
Blastocyst	103 (67.3)	112 (84.8)	52 (51)	

BMI: body mass index; IU: intrauterine; EMT: endometrial thickness; ET: embryo transfer. Continuous data are presented as mean±standard deviation and categorical data are presented as frequency (percentage). a The statistical significance stems from the differences between step-up 2 vs. step-up 4 ($P=0.004$), step-up 2 vs. fixed 6 ($P<0.001$), and step-up 4 vs. fixed 6 ($P<0.001$). b The statistical significance stems from the differences between step-up 2 vs. step-up 4 ($P<0.001$), and step-up 2 vs. fixed 6 ($P<0.001$). c The statistical significance stems from the differences between step-up 2 vs. step-up 4 ($P=0.005$), step-up 2 vs. fixed 6 ($P<0.001$), and step-up 4 vs. fixed 6 ($P<0.001$). d The statistical significance stems from the differences between step-up 2 vs. fixed 6 ($P=0.005$), and step-up 4 vs. fixed 6 ($P=0.020$).

Comparison of outcome parameters between the study groups

	Step-up 2 mg	Step-up 4 mg	Fixed 6 mg	P
Clinical pregnancy, n (%)	65 (41.1)	74 (55.2)	43 (42.2)	0.035
Cycle cancellation, n (%)	5 (3.2)	2 (1.5)	0 (0)	0.161
Miscarriage, n (%)	7 (4.6)	13 (9.8)	4 (3.9)	0.098
Live birth per started cycle, n (%)	58 (36.7)	61 (45.5)	39 (38.2)	0.280
Live birth/ET, n (%)	58 (37.9)	61 (46.2)	39 (38.2)	0.300

ET: embryo transfer.

Comparison of cycle and outcome parameters within blastocyst transfer subgroup

	Step-up 2 mg (n=103)	Step-up 4 mg (n=112)	Fixed 6 mg (n=52)	p
Age, years	30.3±4.5	30.9±5.7	29.6±2.1	0.364
BMI, kg/m ²	26.2±4.1	26.3±4.1	24.8±3	0.074
Smoking, n (%)	9 (8.7)	11 (9.8)	5 (9.6)	0.961
Total estrogen dose, mg	53.9±15.3	67.6±25.2	87.5±36.5	<0.001 a
Duration of estrogen, days	15.2±2.7	12.7±2.4	13.3±4.7	<0.001 b
Maximal EMT, mm	9.7±1.5	10.4±1.1	8.1±0.7	<0.001 c
EMT on ET day, mm	10±1.7	9.8±1	8.7±1.1	<0.001 d
Transferred embryos, n	1.2±0.4	1.2±0.4	1.2±0.4	0.563
Clinical pregnancy/ET, n (%)	46 (44.7)	66 (58.9)	26 (50)	0.108
Miscarriage, n (%)	4 (3.8)	9 (8)	1 (1.9)	0.192
Live birth/ET, n (%)	42 (40.8)	57 (50.9)	25 (48.1)	0.320

BMI: body mass index; EMT: endometrial thickness; ET: embryo transfer. Continuous data are presented as mean±standard deviation and categorical data are presented as frequency (percentage). a The statistical significance stems from the differences between step-up 2 vs. step-up 4 ($P<0.001$), step-up 2 vs. fixed 6 ($P<0.001$), and step-up 4 vs. fixed 6 ($P=0.002$). b The statistical significance stems from the differences between step-up 2 vs. step-up 4 ($P<0.001$), and step-up 2 vs. fixed 6 ($P=0.021$). c The statistical significance stems from the differences between step-up 2 vs. step-up 4 ($P=0.002$), step-up 2 vs. fixed 6 ($P<0.001$), and step-up 4 vs. fixed 6 ($P<0.001$). d The statistical significance stems from the differences between step-up 2 vs. fixed 6 ($P<0.001$), and step-up 4 vs. fixed 6 ($P<0.001$).

SS-089 [infertilité]

Frozen-thawed cycle outcomes of cleavage stage and blastocyst embryo transfer

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AIM: This study was conducted to compare the success of cleavage stage and blastocyst transfer in frozen-thawed cycles of unexplained infertile patients.

MATERIALS-METHODS: 53 patients treated for unexplained infertility at the IVF Department of Istanbul Zeynep Kamil Gynecology and Pediatrics Training and Research Hospital between 2021 and 2022 were included in this study. Of the patients whose remaining embryos were frozen after unsuccessful fresh embryo transfer, those who had thawed embryo transfer grouped in itself according to embryo stage. Patients age, duration of infertility, hormonal parameters, IVF cycle characteristics of; total numbers of retrieved oocytes, numbers of MII oocytes, numbers of MI oocytes, MII-oocyte ratios, numbers of fertilized oocytes, fertilisation rates, numbers of transferred embryos, days of transfer, qualities of the embryos and pregnancy rates were recorded. All collected data were statistically analyzed and groups were compared in terms of IVF treatment outcomes and pregnancy success.

RESULTS: Of the patients included in the study, 27 patients were had cleavage stage embryo transfer and blastocyst transferred patient count was 26. The mean age, the duration of infertility, basal evaluation of FSH, LH, estradiol, TSH and PRL levels were similar between the groups. Stimulation days, antagonist implementation days, total gonadotropin dosages and estradiol levels on the day of hCG administration rates were not statistically different either. The numbers of retrieved oocytes, numbers of MII oocytes, numbers of fertilized oocytes and MII oocyte and fertilisation rates were similar between the groups of patients who transferred thawed embryos of cleavage stage and blastocyst. While 12 patients were transferred 2 embryos in cleavage stage group, this count was 11 in the blastocyst transfer group. Grade 1 embryo rates of cleavage stages were found 79.48%. AA and AB embryo quality rates were found 81.08% in the blastocyst transferred group. Finally while 37% of patients who had cleavage stage transfer were conceived, the rate of those who had blastocyst transfer were 34,6% (10/27 vs 9/26), as it was not statistically different.

CONCLUSION: This study supports that when frozen-thawed cycle characteristics of retrieved oocyte number, maturation and quality of embryos obtained from them is similar between the cleavage stage and blastocyst, the outcome of pregnancy doesn't differ. Further RCTs resulting cumulative live birth rates of cleavage and blastocyst embryo transfers of fresh and thawed cycles are needed to determine if the stage of transfer represents an advantage or disadvantage.

Keywords: Unexplained infertility, frozen-thawed cycle, cleavage stage embryo transfer, blastocyst transfer

SS-090 [İnfertilite]

Comparison of endometrial preparation protocols in frozen-thawed embryo transfer cycles in terms of pregnancy outcomes

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Introduction: Due to the improvements in cryopreservation techniques, frozen-thawed embryo transfer (FET) cycles have been widely used in the world today. FET is preferred to prevent the risk of ovarian hyperstimulation syndrome (OHSS) in hyper-response patients, to freeze surplus embryos after the elective single embryo transfer policy, and to freeze all embryos in patients undergoing preimplantation genetic diagnosis/screening (PGD). It is unclear which protocol is better for preparing the endometrium for frozen embryo transfer cycles. Our study aim is to compare two endometrial preparation protocols regarding pregnancy outcomes.

Materials and Methods: 368 FET cycles applied at Medipol University IVF Center were analyzed retrospectively. Only cycles with good quality blastocyst transfer were included in the study. 108 modified natural FET (mNC-FET) cycles and 260 artificial FET (AC-FET) cycles were compared in terms of demographic-clinical characteristics and pregnancy outcomes. Patients who underwent mNC-FET were followed up with transvaginal ultrasonography. When the follicle reached a mature size it was triggered. The blastocyst was transferred 6 days after the trigger. In the artificial cycle, oral estrogen (3x1) was administered in patients undergoing FET cycles. When the endometrial thickness was above 8 mm, vaginal progesterone(2x1) was started as luteal phase support. Embryo transfer was performed 5 days after progesterone was started.

Results: There was no significant difference between the groups regarding age, body mass index, infertility duration, and embryo freezing indications. However, the anti-mullerian hormone (AMH) level was significantly higher in the AC-FET group than in the mN-FET group ($p<0.0001$ and $p=0.009$) (Table 1). Endometrial thickness was significantly higher in the AC-FET group than in the mN-FET group ($p<0.05$). The groups were similar in implantation, clinical pregnancy, and live birth rates. However, the clinical abortion rate was significantly higher in the AC-FET group ($p<0.05$), and the live birth rates were similar in both groups. (Table 2)

Discussion and Conclusion: As a result of comparing the two groups, we found that although the clinical abortion rates were high in artificial cycles, the live birth rates were similar in both groups. Because the clinical miscarriage rates were low in mNC-FET, it should be recommended for patients with regular menstrual cycles. In addition, it is a more cost-effective and patient-friendly treatment. On the other hand, AC-FET can be recommended for hyper-responsive patients with menstrual irregularity. Consequently, it seems appropriate to prefer individual treatments in frozen-thawed embryo transfer.

Keywords: Frozen-thawed embryo transfer, modified natural cycles, artificial cycles

Demographic and clinical characteristics

Characteristics (Mean± SS)	mNC-FET N=108	AC-FET N=260	P-value
female age	29.0±3.6	28.5±4.8	0.35
BMI	24.2±4.3	24.8±4.6	0.28
AMH	3.59±1.9	5.47±5.2	0.009
Duration of infertility	3.5±1.9	3.9±2.6	0.10
Indication of freezing			
OHSS	77 (71.3%)	182 (70%)	0.21
Surplus embryo	18 (16.7%)	51 (19.6%)	
Surgery planning	4 (3.7%)	17 (6.5%)	
Social indication	9 (8.3%)	10 (3.8%)	

BMI: Body mass index (kg/m²) AMH: Antimullerian hormone

Characteristics of FET cycles

Characteristics of FET cycles	mNC-FET N=108	AC-FET N=260	P-value
Endometrial thickness (Mean± SS)	9.6±1.4	10.0±1.6	0.032
Embryo grade n(%)			0.17
TQ	88 (81.5%)	195 (75%)	
GQ	20 (18.5%)	65 (25%)	
Cryo day(%)			0.15
D5	105 (97.2%)	258 (99.2%)	
D6	3 (2.8%)	2 (0.8%)	
Implantation rate n(%)			0.12
No	43 (39.8%)	82 (31.5%)	
Yes	65 (60.2%)	178 (68.5%)	
Pregnancy outcomes n(%)			0.36
Biochemical miscarriage rates	9 (8.3%)	31 (11.9%)	
Clinical miscarriage rates	10 (10.1%)	40 (17.4%)	0.05
Live birth rates	46 (46.4%)	107 (41.1%)	0.92

SS-091 [İnfertilite]

Effect of laser assisted zona hatching on clinical pregnancy rates in a retrospective cohort of patients who underwent ICSI-ET for different indications

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Objective: Assisted hatching is thought to possibly help with the embryo implantation and is more likely to be recommended when there has been repeated unexplained IVF failure or for patients with a poor prognosis. In this study we aimed to assess the effect of assisted hatching (AZH) on clinical pregnancy rates in a retrospective cohort of patients undergoing ICSI-ET for different indications.

Design: This retrospective study included 498 infertile couples who underwent ICSI-ET with AZH in In Vitro Fertilization Department, University of Health Sciences, Zekai Tahir Burak Health Practice Research Center from January 2010 to October 2017.

Materials and Methods: The oocytes were collected after 34±36 h of hCG administration under transvaginal ultrasound guidance. All oocytes were fertilized by ICSI at 2±3 after oocyte retrieval, and checked for

normal fertilization at 16±18 h after injection. All the embryos were then cultured in sequential media (G1 and G2; Vitrolife) in the presence of 5% CO₂ in incubator (Heracell) for further manipulation. Before embryo transfer, AZH was made with for embryos with thick zona pellucida (≥15 µm), zona abnormality, repeated implantation failure, women of advanced age, poor embryo grade and need of biopsy for preimplantation genetic testing for aneuploidy (PGT-A). The assisted zona hatching was performed for embryos 30 min prior to embryo transfer. Non-contact Laser system (Saturnactive, Research Instruments Limited, UK), attached to an inverted microscope (Olympus IX-71, Tokyo, Japan) was used for zona hatching.

The verification of pregnancy was achieved by the serum hCG concentration 14 days after the embryo transfer, and the clinical pregnancy was confirmed 2 weeks later by the presence of gestational sac with pulsating fetal pole on vaginal ultrasonography. Then clinic, laboratory and pregnancy outcome were investigated in ICSI-ET patients applied laser-assisted zona hatching, during assisted reproduction treatment.

RESULTS: The median age of the women was 31 (18-43) and men was 33(23-62). There was 110 clinical pregnancies in the study group (20.4%). There was no statistically significant difference between pregnant and non-pregnant groups in terms of hormone profile, total gonadotropin dose, trigger day and other cycle characteristics ($p>0.005$ Mann-Whitney U). When we compared the pregnant and non-pregnant groups for AZH indications there was no statistically significant difference ($p=0.154$ Pearson chi-square). **CONCLUSIONS:** These results show that the indications for AZH did not effect the ART outcome. Due to the small sample size of our study, large-scale, prospective randomized controlled trials are required to improve our knowledge of the impact of AZH.

Keywords: AHA, ART, ET, IVF, implantation

SS-092 [Infertilité]

The Effect of Basal Follicle Stimulating Hormone level on the IVF success in Patients with Poor Ovarian Reserve

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PURPOSE: We aimed to analyze the predictive value of Follicle Stimulating Hormone (FSH) levels measured on the third day of the menstrual cycle on the success of ART and live birth rates.

METHOD: We evaluated a total of 904 IVF cycles of 641 patients retrospectively in the reproductive endocrinology clinic. The reproductive outcomes were reported regarding the FSH levels.

RESULTS: Among the 641 patients with 904 IVF cycles, 639 were the first, 200 were the second, 51 were the third, 11 were the fourth, and

three were the fifth cycles of the couples. A total of 567 women with FSH< 10 mIU/mL formed group 1, 288 women with FSH 10 – 14.9 mIU/mL formed group 2, 41 women with FSH 15-20 mIU/mL formed group 3, and 8 women with FSH >20 mIU/mL formed the group 4. In 904 cycles, 785 had oocyte pick up, 55 cycles were transformed to intrauterine insemination and 64 cycles were canceled due to ovarian unresponsiveness. The cycles achieved 129 (14.3%) pregnancies. Regarding the outcomes, there were 74 live births, 43 abortions, 11 chemical pregnancies, and 1 ectopic pregnancy. In the study group, 55 cycles were transformed to IUI, among the 4 (7.27%) cycles achieved pregnancy, 3 ended up with live birth and 1 had missed abortion. Among the 780 women who had OPU, 640 embryos were transferred and 125 achieved pregnancy. The rate of pregnancy per transfer was 19.53%; the pregnancy rate per cycle was 14.72%. Basal FSH levels were not a good predictor for the cancellation of the cycle (auROC = 0.499; $p=0.976$). The highest level of FSH which achieved chemical pregnancy was 19.0 mIU/mL. The highest FSH level which achieved live birth was 14.90 IU/mL. Basal FSH levels had a statistical significance for predicting live birth rates ($p<0.001$). However, despite its statistical significance ($p<0.001$), the area under the ROC curve was small (0.362), which meant the cut-off levels did not have higher sensitivity and specificity. **CONCLUSION:** Basal FSH levels are routinely measured to predict ovarian response in patients who opt for infertility treatment. Basal FSH levels are also significant for predicting live birth rates. With the increasing FSH levels, the number of developing follicles, the number of picked-up oocytes, and the pregnancy rates decrease. The patients with poor ovarian reserve should be counseled about the expected outcomes considering their FSH levels, before the initiation of the treatment.

Keywords: In-vitro fertilization, Follicle stimulating hormone, IVF outcomes, pregnancy

Tablo

Table 1. Ovarian reserve and hormone status according to FSH levels

	FSH <10 mIU/mL (n=567)	FSH 10-14.9 mIU/mL (n=288)	FSH 15-20 mIU/mL (n=41)	FSH > 20 mIU/mL (n=8)	p
Age (years)	32(19-49)	34(20-46)	37(22-44)	34(24-43)	*<0.001
AMH	0.86(0.01-6.8)	0.52(0.01-6.57)	0.42(0.04-1.24)	0.18(0.02-0.6)	*<0.001
AFC (n)	6(1-11)	5(1-13)	4(1-8)	4(2-7)	*0.06
Cycle cancellation	41 (7.2%)	16 (5.5%)	3 (7.5%)	4 (50%)	
Intrauterine insemination	37 (12.8%)	14 (4.86%)	4 (9.7%)	0	
Oocyte pick-up	489 (86.2%)	258 (89%)	34 (82.9%)	4 (50%)	
Embryo transfer	414 (73.0%)	202 (70.1%)	24 (58.5%)	0	
Number of pregnancies	101 (17.8%)	27 (9.4%)	1 (2.4%)	0	***<0.001
Abortion	29 (5.1%)	13 (4.5%)	0	0	0.753
Live birth	65 (11.5%)	8 (2.8%)	0	0	***<0.001

SS-093 [Infertilité]

Duostim: a new strategy for women with poor ovarian response in ART

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AIM: Two or three follicular waves are shown during the intraovulatory period in healthy woman. Double-stimulation within a single menstrual cycle (DuoStim) is an alternative therapy for oocyte and embryo pooling and provides efficient stimulation in patients who have restricted time due to reduced ovarian reserve or fertility preservation before cancer treatment. We aimed to reveal the results of DuoStim protocol in patients with reduced ovarian reserve and who desire to preserve fertility.

MATERIALS-METHODS: We reviewed medical records of 10 patients who were diagnosed as reduced ovarian reserve and underwent the DuoStim protocol in IVF Clinic of Ankara City Hospital. One of them had a cancer and duoStim protocol was applied before cancer treatment. We compared the results of follicular stimulation (DuoStim 1) and luteal phase stimulation (DuoStim 2) within the same cycle. Both stimulations were performed with recombinant follicle stimulating hormone (rFSH) or human menopausal gonadotropin (hMG) in combination with GnRH-antagonist protocol. Ovulation was triggered using GnRH-agonist in the two stimulations.

RESULTS: The mean age of the patients was 31.3±4.3 years. The number of oocytes retrieved after DuoStim 1 and DuoStim 2 was 1.3 ± 1.0 versus 3.4 ± 1.5, respectively. Therefore, the more oocytes were retrieved in DuoStim 2 compared with DuoStim 1 (p= 0.005). In addition, we also found that more numbers of metaphase 2 (MII) oocytes (1.0 ± 0.6 versus 2.9 ± 1.5, p=0.007) and frozen embryos (0.8 ± 0.6 versus 2.1 ± 1.2, p=0.008) were obtained in DuoStim 2 than DuoStim 1.

CONCLUSION: DuoStim protocol seems highly effective therapy to accumulate oocytes and embryos, in a much shorter amount of time when compared with conventional phases of ovarian stimulation.

Keywords: DuoStim, poor ovarian response, fertility preservation, ART

SS-094 [Infertilite]

Comparison of ovarian stimulation results in IVF cycles using Gonal f (follitropin alfa) and Pergoveris (follitropin alfa and lutropin alfa)

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Objective: The aim of this study is to compare the effect of adding lutropin alfa to follitropin alfa in gonadotropin treatment, which we use in ovarian stimulation in IVF, on treatment dose, duration, number of oocytes collected, number of embryos formed and live births compared to follitropin alfa alone. We primarily aimed to see if there is a statistically significant difference in the number of live births between

the two drugs. We also compared the superiority of the two drugs to each other in terms of OHSS (ovarian hyperstimulation syndrome) side effects that may occur during the use of drugs.

Patients and Methods: Infertile women aged 20-44 years who applied to Ondokuz Mayıs University Medical Faculty Hospital IVF center between January 2021 and June 2021 and could not get pregnant despite 1 year of regular unprotected intercourse for any reason (unexplained infertility, low ovarian reserve, male factor, etc.) were included in the study. Between these dates, 50 female patients for whom we preferred Pergoveris for ovarian stimulation in our clinic and 50 female patients for whom we preferred Gonal-f were included in the study. The study included female patients aged 20-44 years, who had regular menstruation, who could not become pregnant (infertile) despite at least 1 year of regular unprotected intercourse, and who tried IVF treatment for the first time. Patients with recurrent IVF cycles, under the age of 20 and over the age of 44, diagnosed with PCOS and endometriosis, oocyte pooling due to decreased ovarian reserve, hypogonadotropic hypogonadism due to infertility and male factor azoospermia and total progressive motile sperm count below 1.5 million/ml were excluded from the study. Patients' age, body mass index, cause of infertility, duration of infertility, basal fsh value, and antral follicle count were recorded. After choosing the appropriate gonadotropin, the dose and induction times of the drug were compared, and the number of oocytes collected, the number of metaphase 2 (m2) oocytes, the number of embryos formed, the embryo grade, the number of frozen and transferred embryos were recorded.

Results: The causes of infertility are similar among the patient groups using Gonal-f and Pergoveris with similar individual characteristics. The drug dose used is higher in Pergoveris, and the induction times are similar for both drugs. The number of collected oocytes, the number of M2 oocytes, the number of formed-frozen-transferred embryos are similar. While embryos that can be transferred on the 3rd day are higher in patients using gonad-f, embryos transferable on day 5 were similar in both groups. Both groups were similar in terms of results of live birth, twin pregnancy, abortion, ectopic pregnancy, chemical pregnancy and OHSS side effects. No embryos were formed in 8 patients using Pergoveris. Embryo formation was observed in all patients using Gonal-f.

Discussion and Conclusions: No significant difference was found in terms of number of oocytes collected, the number of formed-transferred-frozen embryos, live birth rate, multiple pregnancy rate and OHSS as a result of ovarian stimulation with Gonal-f and Pergoveris drugs.

Keywords: Embryo, follitropin alfa, luteotropin alfa, OHSS, oocyte count, ovarian stimulation.

Table 4: Comparison of findings obtained with induction therapy

	Gonal-f (n=50)	Pergoveris (n=50)	p value
Endometrial thickness (mm)	8 (4-10)	8 (4-12)	0.929
Gonadotropin dose	300 (75-450)	450 (200-450)	0.029*
Duration of stimulation (day)	8 (2-12)	8 (1-13)	0.536
Number of picked-up oocytes	11 (2-48)	10 (0-34)	0.132
Number of M2 oocytes	8 (2-41)	7 (0-23)	0.120
Number of embryos	5 (1-28)	4 (0-15)	0.072
Number of frozen embryos	1 (0-8)	0 (0-8)	0.187
Number of transferred embryos	1 (1-2)	1 (0-2)	0.118

*p<0.05

SS-095 [İnfertilite]

Does the addition of 17 α -hydroxyprogesterone caproate for luteal phase support improve ICSI outcomes in fresh embryo transfer cycles?

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AIM: We aimed to assess whether the addition of intramuscular 17 α -hydroxyprogesterone caproate for luteal phase support in patients undergoing fresh ICSI–embryo transfer cycles improve the outcomes. **MATERIALS-METHODS:** A total of 400 GnRH antagonist cycles were included in this study. The patients were divided into two groups according to the luteal phase support used. The women received vaginal micronized progesterone 200 mg (Progestan®) 3x1 started on the day of oocyte pick (OPU) until the day of serum hCG test, plus a single dose of subcutaneous triptorelin acetate 0,2 mg (Gonapeptyl®) on the sixth day after OPU (Group I, n=200 cycles). The women were given an additional single dose of intramuscular 17 α -hydroxyprogesterone caproate 500 mg (Proluton Depot®) on the sixth day after OPU (Group II, n=200 cycles). The ICSI outcomes of both groups were compared according to the serum hCG positivity as well as the biochemical, clinical, ongoing pregnancy and miscarriage rates. **RESULTS:** The groups were similar with respect to the ages of the patients; antral follicle counts and serum antimüllerian hormone (AMH) levels. The mean numbers of total oocytes retrieved, MII oocytes, embryos transferred and endometrial thickness on hCG day did not differ between the groups. In group II, a statistically higher serum hCG positivity (42.5% versus 28%, $P < 0.05$), clinical pregnancy rate (36.5% versus 22.5%, $P < 0.05$) and ongoing pregnancy rate (28.5% versus 18%, $P < 0.05$) were found compared to group I. No differences were found in biochemical pregnancy and miscarriage rates between the groups ($P \geq 0.05$). In multivariate regression analysis model, the administration of 17 α -hydroxyprogesterone caproate was found to be an independent factor for higher serum hCG positivity (OR, 1.87; 95% CI, 1.16-3.04; $P = 0.011$) and higher clinical pregnancy rate (OR, 1.82; 95% CI, 1.09-3.01; $P = 0.021$). **CONCLUSION:** The addition of a single dose of intramuscular 17 α -hydroxyprogesterone caproate 500 mg on the sixth day after OPU to vaginal progesterone and GnRHa for luteal phase support improves the serum hCG positivity and clinical pregnancy rates in fresh ICSI–embryo transfer cycles.

Keywords: 17 α -hydroxyprogesterone caproate, luteal phase support, fresh ICSI–embryo transfer

Table 1. Patient characteristics

Variable	Group I (GnRHa+vaginal P) (n=200 cycles)	Group II (17 α -hydroxyprogesterone caproate+GnRHa+vaginal P) (n=200 cycles)	P-value
Age (year)	32.5 \pm 5.1	31.6 \pm 5.1	NS
AFC	11.1 \pm 4.5	11.5 \pm 5.1	NS
AMH (ng/ml)	2.9 \pm 3.2	2.6 \pm 2.1	NS
Total dose of gonadotropin (IU)	1939 \pm 726.2	1908.7 \pm 634.3	NS
Endometrial thickness on hCG day, mm	9.9 \pm 2.3	9.7 \pm 1.9	NS
Number of total oocytes retrieved	8.4 \pm 5.1	7.6 \pm 3.9	NS
Number of MII oocytes	6.5 \pm 4.4	5.6 \pm 2.9	NS
Number of embryos	3.8 \pm 2.7	3.6 \pm 2.2	NS
Number of transferred embryos (1 embryo)	126 (63%)	138 (69%)	NS
Number of transferred embryos (2 embryo)	74 (37%)	62 (31%)	NS

Table 2. Pregnancy outcomes of patients in Group I and II

Variable	Group I (GnRHa+vaginal P) (n=200 cycles)	Group II (17 α -hydroxyprogesterone caproate+GnRHa+vaginal P) (n=200 cycles)	P-value
Number of serum hCG positivity	56 (28%)	85 (42.5%)	0.002
Clinical pregnancies (n) (%)	45 (22.5%)	73 (36.5%)	0.003
Ongoing pregnancy (n) (%)	36 (18%)	57 (28.5%)	0.018

SS-096 [Obstetri Genel]

The efficacy of three regimes of uterotonic agents for prevention of postpartum hemorrhage at elective cesarean section: a prospective randomized clinical trial

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Objective: Postpartum hemorrhage (PPH) still remains the most popular topic in obstetrics because PPH is one of the leading causes of maternal morbidity and mortality in all over the world. There are recently many technological and pharmacologic advancement for the management of PPH. However, the principal strategy is exactly to prevent PPH with active management of the third stage of labor by the routine administration of uterotonics agents to improve uterine contractions following by reducing maternal morbidity and mortality. The purpose of our RCT was to determine whether there was any difference for three regimes of uterotonic agents in primary outcomes of postpartum hemorrhage in women undergoing CS.

Material and Methods: This was prospective, randomized, controlled study between July 2021 and January 2022 and written informed consent was obtained from all patients. We included a total of 156 women between 18 and 40 years of age who underwent a primary CS under spinal anesthesia at term single pregnancy with an ASA physical

status of I or II. This trial was designed and reported according to the Consolidated Standards of Reporting Trials (CONSORT) guidelines. The patients included in this study were randomly divided into three groups. Group I: oxytocin (n = 52), Group II: oxytocin plus intrauterine misoprostol (n = 52) Group III: 100-mg carbetocin (n=52). All surgeries were performed by the same team of two surgeons (PO, CC).

Results: A total of 182 women were enrolled in our study. 26 women were excluded before randomization (16 did not meet the inclusion criterias and 10 refused the participate). The results of total of 156 women who met the inclusion criteria were analysed in our study, of which 52 women were allocated to group I, 52 women to group II and 52 women to group III. After randomization, none were excluded. There was no significantl different with regard to age, BMI, gravida, parity, gestational age at birth and the indication of CS between groups. The trend towards a decrease intraoperative hemorrhagy was observed in group 3. However, 21,1% (11) of group I, 25% (13) of group II and 26,9%(14) of group III had blood loss >1000 ml while all groups were similar to each other with regard to blood loss (p =0,78). The highest ratio of blood loss >1000 ml was observed in group III. Only one case in group 3 required to further surgical intervention as uterine artery ligation due to intraoperative hemorrhage. Only one case in group II needed a blood transfusion.

Conclusion: Our results demonstrated that there is no superiority of carbetocin for the prevention of PPH in women undergo elective CS. Moreover, there is disparity between the cost of oxytocin and carbetocin. Oxytocine seems to still be good effective alternative with low-cost and favorable adverse-effect profile for the prevention of PPH. We suggest the routinely use of oxytocin could continue at elective CS before the routinely adoption of carbetocin as an alternative to oxytocin until strong evidence for the superiority of carbetosine will be demonstrated.

Keywords: Postpartum hemorrhage, Oxytocin, Cesarean section, Uterotonic agents

Table 1

Characteristics	Group I (n=52)	Group II (n=52)	Group III (n=52)	p value
The pre-operative hemoglobin concentration (g/dL)	11,81±1,24	12,05±1,29	11,9±1,21	0,6
The pre-operative hematocrit concentration (g/dL)	35,60±3,63	36,25±3,4	35,94±3,3	0,63
The changing of the hemoglobin concentration (g/dL)	1,05±0,93	1,08±0,89	0,97±0,88	0,64
The changing of the hematocrit concentration (g/dL)	3,33±3,41	3,13±2,78	2,9±2,89	0,59
Operating time (min)	49,65±17,05	46,00±12,14	44,13±12,71	0,12
Intraoperative blood loss (mL)	721,96±370,06	810,60±556,18	755,52±533,3	0,84
Intraoperative additional hemostatic uterine sutures	48,1%(25)	53,8%(28)	40,4%(21)	0,38
Need for additional uterotonics	21,2%(11)	28,8%(15)	11,5%(6)	0,09
Need for blood transfusion	0%(0)	1,9%(1)	0%(0)	1

Comparison of operative characteristics, hemorrhage and post-operative characteristics between groups.

SS-097 [Obstetri Genel]

Efficacy of Prophylactic tranexamic acid use after vaginal delivery according to Postpartum Hemorrhage Risk: prospective randomized double blind study

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AIM: In recent years, many new treatment protocols have been studied to reduce mortality and morbidity due to postpartum hemorrhage, one of them is tranexamic acid treatment comes first as a medical treatment. Although the WHO recommends tranexamic acid to be a part of the standard comprehensive postpartum hemorrhage treatment, its place in prophylaxis is controversial. Studies on the effect of tranexamic acid on postpartum hemorrhage mostly cover cesarean deliveries. In vaginal deliveries the number of studies the effect of tranexamic acid is limited. Therefore, our aim in this study is to evaluate the efficacy of prophylactic tranexamic acid use after vaginal delivery in pregnant women aged 18-45 years and 34-42 weeks according to the risk of postpartum hemorrhage.

METHOD: This study was conducted as a double-blind prospective randomized controlled Phase 4 study with 480 singleton pregnant women between the ages of 18-45, who gave birth at 34 weeks and above, between September 1, 2021 and February 28, 2022 in Bursa Yüksek İhtisas Training and Research Hospital. The patients were divided into two groups according to their postpartum bleeding risks as low-risk (240 patients) and high-risk (240 patients), and then the patients in each group were randomly divided into two groups, and some of these pregnant women were given intravenous tranexamic acid and some were given placebo. The loss of blood at the 3rd and 4th stages of labor was calculated by weighing the blood collected with the help of collecting bag and using the estimated blood loss formula. The success of tranexamic acid in patients grouped according to the postpartum bleeding risk scale, association with atony, need for blood transfusion, need for extra uterotonics, and the gastrointestinal side effects of tranexamic acid such as nausea, vomiting, and diarrhea were evaluated.

RESULTS: In low-risk patients, when the group given tranexamic acid and the placebo group were compared the bag blood volume (150 (30-720) and 242,5 (70-900), p<0.001) and blood loss calculated with the formula (382,5 (12,96-1467,78) ve 465,2 (63,1-1511,2), p=0,013) respectively were less which was statistically significantly. In high-risk patients, when the group given tranexamic acid and the placebo group were compared the bag blood volume (100 (20-600) and 285 (40-1000), p<0.001) and the blood loss calculated by the formula (293,6(14,49-1324,6) ve 470,37(100,4-2489,4), p<0,001) respectively were less which was statistically significantly. In addition, the development of atony was found to be statistically significantly more common in the high-risk group that did not use transamin (p:0.029).

CONCLUSION: In high-risk patient groups the use of transamine in the active management of normal delivery for postpartum hemorrhage reduces the amount of bleeding and the possibility of atony risk. In

this group of patients, incorporating transamin as part of the active management of labor can reduce mortality and morbidity. Therefore, we think that tranexamic acid can be used as an effective complementary medicine together with the methods used in active management of labor to prevent postpartum blood loss, reduce complications and improve maternal health in women with a high risk of postpartum hemorrhage.

Keywords: tranexamic acid, vaginal delivery, postpartum hemorrhage, active management of vaginal delivery

SS-098 [Obstetri Genel]

The efficiency of temporary uterine artery ligation on prevention of the bleeding in cesarean section

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Objective: Many medical and surgical procedures have been tested to reduce the amount of bleeding and prevent postpartum bleeding in such a frequent surgical procedure. Theoretically, bilateral compression of the uterine artery using an atraumatic temporary clamp placed over the broad ligament will reduce the amount of bleeding to the uterus and decrease the expected bleeding during the operation. So far, there has been no prospective and randomized controlled study evaluating the effect of temporary bilateral uterine artery clamping on the bleeding during cesarean delivery. Therefore, in this study, it was aimed to evaluate the effect of prophylactic bilateral uterine artery clamping on intraoperative and postoperative blood loss in postpartum bleeding cesarean deliveries.

Methods: This was a prospective, randomized and controlled study. We recruited a total of 200 patients, including 100 cases and 100 controls. The bilateral uterine artery was temporarily clamped (Figure 1) 2 cm below the uterine incision in the study group and compared with controls. Patient demographics, the amount of intraoperative bleeding, the duration of the operation, the closure time of the uterine incision, the need for additional uterotonics, the need for additional sutures and the hemoglobin values before and after birth were assessed.

Results: The mean value of the amount of bleeding in the clamped and control groups were 267.3 ± 131.8 ml and 390.2 ± 116.4 ml, respectively. The amount of bleeding was significantly decreased for clamped group ($p < 0.001$) (Figure 2). A significant reduction occurred in the results of pre and postoperative values of hemoglobin and hematocrit difference, operation duration, and the closing time of the uterine incision in the experimental group which has temporary uterine artery clamping.

CONCLUSION: This study has shown that the application of an atraumatic clamp over the broad ligament at the level of the uterine artery during the cesarean section procedure is a simple, easy, and feasible method. This method reduces blood flow to the uterus and reduces the amount of intraoperative bleeding. Decreased blood loss during

cesarean section will help to reduce the risk of postpartum bleeding. In addition, the reduction in maternal hemoglobin and hematocrit levels will also be prevented. Therefore, with a low risk of complication, prophylactic temporary uterine artery ligation can be used to decrease the amount of bleeding during primary cesarean section and to prevent postpartum hemorrhage.

Keywords: Cesarean section, Postpartum bleeding, Temporary uterine artery clamping

Figure 1

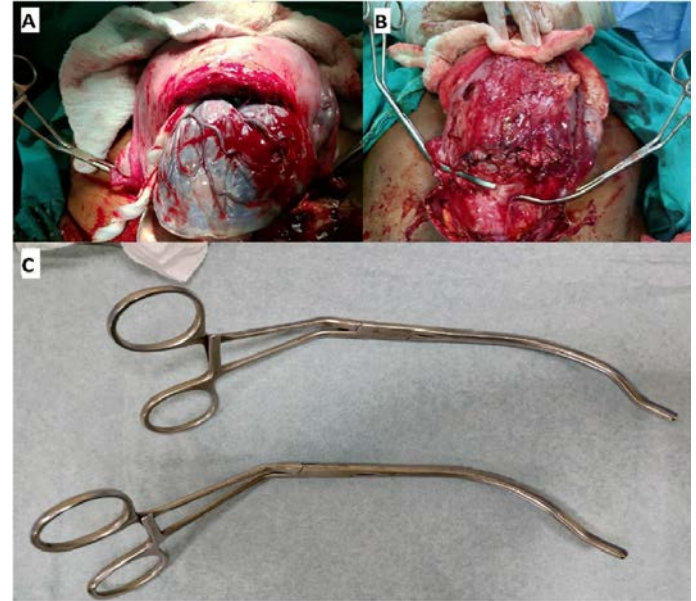
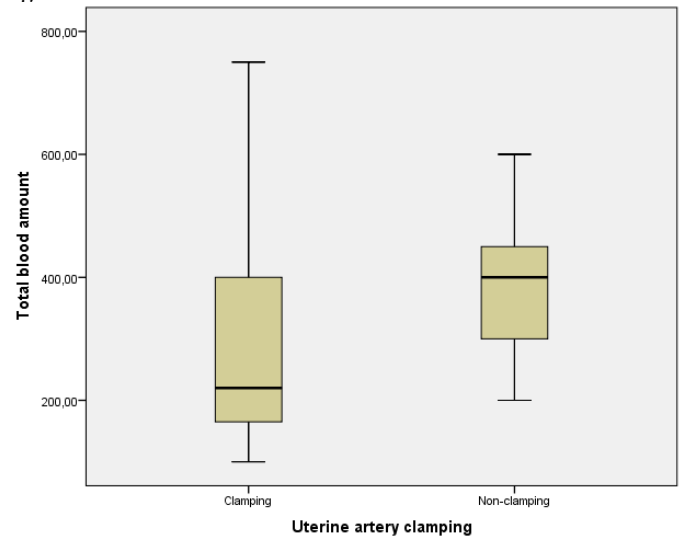


Figure 1 A: Clamps were placed following the birth of fetus. B: Uterine closure. C: DeBakey artery clamp

Figure 2



Differences of total blood amount

SS-099 [Obstetri Genel]

Disseminated intravascular coagulation in pregnancy: underlying causes and effect on prognosis

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AIMS: To investigate the prognosis of disseminated intravascular coagulation (DIC), diagnosed using pregnancy-modified DIC scoring system and to evaluate the effect of different obstetric etiologies on morbidity and mortality.

METHODS: This study was retrospectively registered (Decision no: 01/05- 19.01.2021). Among obstetric conditions that pose a high risk for DIC such as obstetric hemorrhage, abruption placenta, preeclampsia / HELLP syndrome, those with a DIC score ≥ 26 were accepted as DIC. These patients were compared in terms of laboratory results, maternal morbidity / mortality and neonatal outcomes according to the underlying disease.

RESULTS: The incidence of DIC was 0.14%, with 224 DIC cases out of 154,233 deliveries in our center. In the preeclampsia / HELLP syndrome group, platelet count, prothrombin time were lower and fibrinogen level was higher than those of the obstetric hemorrhage and placental abruption groups. In addition, the rates of blood transfusion and hysterectomy were lower in women who developed DIC due to preeclampsia/HELLP syndrome than in those with obstetric hemorrhage.

CONCLUSION: Considering the underlying disease is important in predicting prognosis when using the new pregnancy-modified diagnostic scores for DIC diagnosis.

Keywords: disseminated intravascular coagulation (DIC), modified DIC scoring, pregnancy

SS-100 [Obstetri Genel]

Management of placenta invasion anomaly in pregnancy: Eight-year experience of a tertiary center

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OBJECTIVE: This study aims to present the clinical experience of the preferred surgical methods, development of complications and outcomes in the management of pregnant cases with placental invasion anomalies treated in Gaziantep University Hospital between 2013-2021.

METHODS: The demographic and clinical data of 302 patients who were followed up in our center, referred from another center, or admitted to our emergency department were recorded. Types of surgical methods, obstetric-urogynecological complications, pathological specimen results, transfer rates to the intensive care unit, and requiring of blood transfusion were examined in detail. The number and percentage of patients in each group were calculated and results were given in a matrix form.

RESULTS: As seen in Table 1, 195 of 302 patients (group 1) were treated by cesarean hysterectomy (CH) \pm hypogastric artery ligation (HAL). Of the remaining 107 patients underwent the two methods: a) the HAL \pm uterine balloon tamponade (UBT) \pm stepwise uterine devascularization (SUD) for 57 patients (group 2), b) the anterior uterine segment resection (ASR) \pm HAL for 50 patients (group 3). Histological examination of the surgical specimen of "group 1" confirmed the diagnosis of percreta in 162 patients, increta in 15 patients, accreta in 16 patients, non-invasive previa totalis in 2 patients. Furthermore, the results of "group 2" showed percreta in 24 patients, increta in 8 patients, accreta in 18 patients, while it was percreta in one patient, increta in 26 patients, accreta in 30 patients of "group 3". Only one patient of percreta had the complication of unilateral ureteral ligation (Table 2). The complication of bladder injury occurred in a total of 41 patients, consisting of 35 percreta, 3 increta, and 3 accreta. In addition, three of the patients who underwent bladder repair had complications of bladder fistula on cystography. Apart from these, three patients suffered unilateral internal iliac vein injury during the hypogastric artery ligation surgery. There were no extra complications after the iliac vein repair in these patients. During the peripartum period, 102 of 302 patients received blood transfusions. A total of 77 patients underwent HAL, and 35 of them received blood transfusions. Because of unstable vital signs and peripartum hemorrhages, 32 patients were transferred to the intensive care unit. Maternal death occurred in one case of percreta with acute vaginal bleeding.

CONCLUSIONS: Placental invasion anomalies cause peripartum hemorrhages, urogynecological surgical complications, maternal mortality, and morbidity. Immediate intervention and an energetic approach are crucial to prevent maternal mortality. The traditional treatment method for these patients is CH. Various conservative methods such as HAL, UBT, SUD, or ASR may be preferred to preserve fertility. These patients must be followed up and treated by an experienced team in tertiary centers of intensive care units, blood banks, and other surgical departments. In turn, a multidisciplinary team is indispensable to intervene in additional complications that may develop.

Keywords: Cesarean hysterectomy, Placenta accreta spectrum, Placental invasion anomalies

Table 1. Pathological classification according to surgical groups

Surgical Groups (Right) Pathological Results (Down)	CH \pm HAL n=195 (64.5%) (Group 1)	HAL \pm UBT \pm SUD n=57 (18.9%) (Group 2)	ASR \pm HAL n=50 (16.6%) (Group 3)
Percreta n=187 (61.9%)	162 (53.6%)	1 (<0.4%)	24 (7.9%)
Increta n=49 (16.2%)	15 (4.9%)	26 (8.6%)	8 (2.7%)
Accreta n=64 (21.2%)	16 (5.2%)	30 (9.9%)	18 (6%)
Non-invasive Previa Totalis n=2 (<0.7%)	2 (<0.7%)	-	-

HAL: Hypogastric artery ligation, UBT: Uterine balloon tamponade, SUD: Stepwise uterine devascularization, ASR: Anterior segmental resection (Uterine wall local resection and reconstruction), The total number of patients= 302, Percentages were calculated based on the total number of patients.

Table 2. Complications and supportive treatments by type of invasion

Complications and Supports (Right) Pathological Results (Down)	Injury of Bladder n=41 (13.3%)	Intensive Care Unit Transfer n=32 (10.5%)	Blood Transfusion n=102 (33.8%)	Internal Iliac Vein Injury n=3 (~1%)
Percrura n=187 (61.9%)	35 (11.5%)	23 (7.6%)	72 (23.8%)	-
Incrura n=49 (16.2%)	3 (~1%)	4 (1.3%)	13 (4.3%)	2 (<0.7%)
Accrura n=64 (21.2%)	3 (~1%)	5 (1.6%)	16 (5.3%)	1 (<0.4%)
Non-invasive Previa Totalis n=2 (<0.7%)	-	-	1 (<0.4%)	-

The total number of patients= 302, Percentages were calculated based on the total number of patients.

SS-101 [Obstetri Genel]

Maternal Serum Preimplantation Factor Levels In Early Preeclamptic Patients *Muhammet Atay Özten Zonguldak Bülent Ecevit University Faculty of Medicine Department of OB&GYN*

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Preimplantation factor (PIF) is a 15 amino acid (MVRIKPGSANKPSDD) peptide that is released by living and developing embryos and is detectable throughout pregnancy. PIF has been shown to have an autotrophic and protective effect on the embryo. PIF in maternal serum düzeyinin sığırlarda ve kobaylarda canlı doğumlarla ilişkili olduğu görülmüştür. PIF also helps to regulate the maternal microenvironment by increasing human endometrial receptivity. In human decidua cells, PIF elicits a pro-apoptotic effect and contributes to the formation of a beneficial proinflammatory microenvironment.

OBJECTIVE: In our study we aimed to compare the maternal serum Preimplantation Factor levels among early preeclamptic patients with the healthy controls at the same gestational age. **Materials & Methods:** The study took part in our clinic's (Zeynep Kamil Women's and Children's Diseases Education and Research Hospital) perinatology ward and the healthy expecting polyclinics. 39 early preeclamptic (< 34 gestational weeks) patients admitted to perinatology clinic and 45 normal healthy expecting women have been added to our study. Competitive ELISA (Elabsience Biotechnology Co) has been used to analyse the PIF levels in the collected samples. Gestational age, maternal age, gravida, parity, fetal growth, BMI, maternal weight and height, plasma PIF levels have been collected/measured and analysed in all groups.

RESULTS: There has been no statistically significant difference between the study and control groups considering the gestational age, maternal age, gravida, parity, and fetal growth. Maternal weight and BMI were statistically significant high in the study group. The main

parameter of our study –the Preimplantation Factor- was significantly higher in study group than the healthy controls. (100,36 ± 41,92 vs. 83,14 ± 51,27 p=0,016)

CONCLUSIONS: our study we have found the Preimplantation Factor levels statistically higher in the study group in comparison with the control group. (p=0,016) PIF levels might have a role in the progression and features of the preeclamptic patients. Our study is one of the first studies that has been conducted in maternal serum investigating PIF. Further investigation and studies with larger groups have to be planned and performed to resolve the real relation between PIF and preeclampsia.

Keywords: PIF, Early Preeclampsia, Maternal Serum

SS-102 [Obstetri Genel]

The assesment of the plasma neurokinin B concentrations in healthy non pregnant women and pregnant women in with or without preeclampsia and its potential relationship with mean arterial blood pressure

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AIM: Despite of the assumed several mechanisms, pathogenesis of preeclampsia has not been wholly elucidated yet. Arterial blood pressure is a major risk factor for the improvement of hypertension. Usually in pregnant population, arterial blood pressure was defined with only systolic and diastolic blood pressure levels; while evaluation of mean arterial blood pressure (MABP) has been less studied. In daily clinical practice, MABP easily provided without additional costs and which dedicates more important data about the daily mean changing blood pressure levels instead of instant levels. Neurokinin B is a peptid neurotransmitter and it is mainly expressed by neurons and immun system cells. It was defined that this peptide may have several effects on vessel reactivity, smooth muscle contraction, immun system activation and neurogenic inflammation. Additionally, neurokinin B induces to venous contraction and increased heart rate. In hypertensive patients, it was defined that serum levels of neurokinin B were increased. However, both pregnancy related data of this peptide demonstrates divergent results and potential relationship with neurokinin B and MABP have not been fully determined. Therefore, in this study we measured MABP and plasma levels of neurokinin B in normotensive non pregnant women and pregnant women in with or without preeclampsia. Thus, we investigated whether potential association with this neuropeptide and MABP may effect the development of the preeclampsia.

METHODS: Non pregnant healthy women (n=39), preeclamptic (n=32) and normotensive (n=36) age and gestational age matched pregnant women were prospectively included in this study. Plasma neurokinin concentrations were measured by using "enzyme immuno assay" technique. The MABP was calculated by using this equation: $MABP(mmHg) = [Systolic\ blood\ pressure(mmHg) + 2 \times Diastolic\ blood\ pressure(mmHg)] / 3$.

RESULTS: Clinical and laboratory findings of complete study population were summarized in the table1. In preeclamptic women, systolic, diastolic and mean blood pressure levels were significantly higher than two groups ($p < 0.005$). Moreover, plasma neurokinin B concentrations of preeclamptic group (104.2 ± 5.38 ng/L) were higher than both normotensive pregnant (80.61 ± 33.3 ng/L; $p = 0.009$) and non pregnant women (76.41 ± 59.6 ng/L; $p = 0.006$). In linear regression analysis, MABP which was defined as a dependent variable was significantly associated with neurokinin B which was determined as an independent variable ($\beta = 1.217$, $p = 0.033$) and $X(MABP) = 10.492 + (2.274xY(Neurokinin))$ equation was obtained.

CONCLUSION: According to our results, increased levels of plasma neurokinin B may be associated with MABP. It has been suggested that, larger longitudinal studies evaluating BNP concentrations in the preeclampsia should be conducted to address the relationship between neurokinin B levels and maternal cardiac functions including MABP which both easily obtained without additional costs and provides more widely data about the daily MABP levels instead of momentary levels.

Keywords: Mean arterial blood pressure, neurokinin B, preeclampsia, pregnancy.

Table 1.

Table 1. Clinical and laboratory findings of complete study population.

	Non pregnant women (n=39)	Healthy pregnant women (n=36)	Preeclamptic women (n=32)	p value		
				Non pregnant vs. healthy pregnant	Non pregnant vs. preeclamptic	Healthy pregnant vs. preeclamptic
Age, year	24.17 \pm 0.62	24.17 \pm 14.6	24.41 \pm 8.53	>0.05	>0.05	>0.05
Gestasyonel age, weeks day	-	30.17 \pm 5.72	31.59 \pm 6.94	Not applicable	>0.05	>0.05
Body mass index, kg/m ²	23.77 \pm 9.26	30.09 \pm 13.82	30.71 \pm 16.33	0.02	0.02	>0.05
Systolic blood pressure, mmHg	121.47 \pm 37.4	108.35 \pm 16.38	151.7 \pm 81.39	0.04	0.029	<0.001
Diastolic blood pressure, mmHg	78.16 \pm 0.96	70.53 \pm 24.3	94.58 \pm 16.29	0.04	0.026	<0.001
Mean arterial blood pressure, mmHg	92.49 \pm 72.9	83.17 \pm 33.3	115.28 \pm 52.4	0.037	0.014	<0.001
Plasma Neurokinin-B concentrations, ng/L	76.41 \pm 59.6	80.61 \pm 33.3	104.29 \pm 4.38	0.041	0.006	0.009

One-way ANOVA and Bonferroni's tests were conducted. $p < 0.05$ was significant

Table 1. Clinical and laboratory findings of complete study population.

SS-103 [Obstetri Genel]

The determination of various predictor markers role of hypertension in pregnancy

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The aim of the study was to assess the prognostic significance of clinical and anamnesis risk factors and immunological markers of hypertensive disorders during gestation.

Materials and methods of research: 100 pregnant women in the first trimester of pregnancy (up to 15 weeks) were examined. Clinical and anamnesis risk factors for hypertension were studied (age, parity, hypertensive disorders in the past, family history of hypertension, infertility, multiple pregnancies, somatic diseases, etc.), immunograms (general immunological reactivity of the organism, level of autoantibodies to 12 antigens) ELIS-P-Complex-12 enzyme-linked immunosorbent assay and placental growth factor (PLGF) by the method of enzyme immunoassay. The following indicators of predictive characteristics were determined by statistical METHODS: sensitivity (Se), specificity (Sp), predictive value of absence of sign (PV-) and prognostic value of presence of trait (PV+).

RESULTS: The study showed that the most significant clinical and anamnesis prognostic markers of hypertensive disorders in pregnant women are the presence of chronic hypertension (PV + 100%), the presence of preeclampsia in the anamnesis (PV + 83.3%), vaginal bleeding in a real pregnancy (PV + 83.3%), the first pregnancy (PV + 76.9%), somatic diseases of the mother (PV + 76.2%) and a combination of three or more risk factors (PV + 85.2%). Preclinical immunological markers are a high level of autoantibodies to S-100 (PV + 100%), ANCA (PV + 92.8%) and B-2QP (PV + 80.9%) against immunosuppression of the body and a decrease in the level of PLGF in the blood below 150 pg / ml.

CONCLUSION: Early detection of prognostic markers will allow to allocate among pregnant women in the first trimester of pregnancy a group of increased risk for the development of hypertension. This will provide an opportunity to initiate the prevention of hypertensive disorders from the beginning of pregnancy and improve the outcomes of pregnancy.

Keywords: preeclampsia, risk factors, autoantibodies, placental growth factor

SS-104 [Perinatoloji]

Efficacy of APRI, DNI, NLR, PLR, and PDW in predicting the severity of gestational hypertension and preeclampsia

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OBJECTIVE: In this study, we aimed to show the efficacy of APRI, DNI, NLR, PLR, and PDW in predicting the severity of gestational hypertension (GHT) and PE and determine whether these factors may be used as screening tools.

MATERIALS-METHODS: In this retrospective study, we screened and classified pregnant women who were normotensive (control) or had GHT, PE, or severe PE (SPE). Normotensive pregnant women (n=792) who met this eligibility criterion were included as the control group by being randomized according to the application on odd days of the week. Singleton pregnant 1,213 women who met the following criteria for the diagnosis of preeclampsia were included in the study group. We identified 641 patients with GHT, 208 patients with PE, and 364 patients with SPE.

RESULTS: The mean NLR at hospitalization was significantly higher in the control (4.51 ± 1.89) and SPE group (4.57 ± 3.03) than that in the GHT (4.16 ± 1.63 , $p=0.007$ and $p=0.012$, respectively) and PE (3.85 ± 1.56 , $p<0.001$ for each pairwise comparison) with no difference between either the GHT and PE or the control and SPE groups. We found significantly higher mean PLR in the SPE group (121.6 ± 52.9) compared to that in the control (132.5 ± 59.5 , $p=0.007$) and GHT (136.6 ± 47.1 , $p<0.001$) groups. The mean PDW was significantly lower in the control group (54.2 ± 7.4) than in the GHT (55.3 ± 8.3) and SPE (56.7 ± 8.8) groups ($p=0.046$ and $p<0.001$, respectively). SPE group had significantly higher mean APRI (1.41 ± 9.36) than that of the control (0.23 ± 0.09 , $p<0.001$), GHT (0.23 ± 0.11 , $p<0.001$) and PE (0.24 ± 0.15 , $p=0.004$) groups. The groups did not differ by their DNI ($p=0.125$). ROC analysis was performed between the control and SPE groups, and the factors that could predict SPE were evaluated as univariate. We determined PDW and APRI as independent parameters that could predict CPE by multiple logistic regression analysis.

CONCLUSION: We determined that NLR, PLR, DNI and PDW were not clinically important in evaluating the risk of developing GHT and PE and predicting the severity of preeclampsia. We further suggested that APRI could give clinical clues about the progression of hypertensive disorders of pregnancy to SPE, which seems to be a promising implication, warranting verification by further studies.

Keywords: Gestational hypertension, delta neutrophil index (DNI), neutrophil lymphocyte ratio (NLR), platelet lymphocyte ratio (PLR), platelet distribution width (PDW), aspartate aminotransferase platelet ratio index (APRI)

Figure 1

Figure 1. ROC analysis curve for PDW between the control and GHT groups.

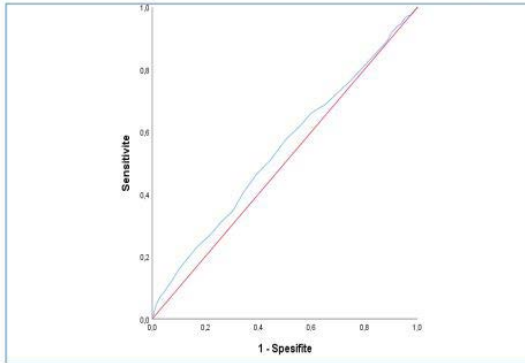


Figure 2

Figure 2. ROC analysis curve for NLR between the control and GHT groups.

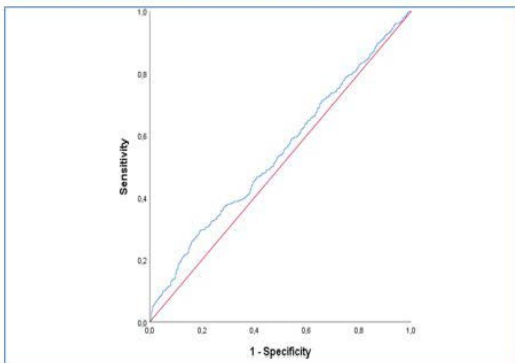
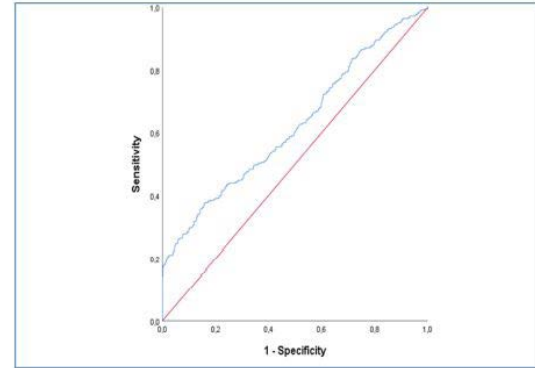


Figure 3.

Figure 3. ROC analysis curve for APRI between the SPE and GHT groups.



Table

Table 8. Comparison of the study groups in terms of available laboratory parameters by 20th weeks of gestation.

	Control n=363	GHT n=283	PE n=80	SPE n=143	p-value
NLR, mean \pm SD	3.20 \pm 1.22	3.39 \pm 1.99	3.17 \pm 1.37	3.17 \pm 1.05	0.294
PLR, mean \pm SD	146.2 \pm 62.5	157.1 \pm 119.3	150.6 \pm 44.8	146.3 \pm 43.2	0.365
PDW, mean \pm SD	48.2 \pm 6.2	49.7 \pm 7.1	47.1 \pm 7.6	49.5 \pm 6.9	0.003*
DNI, mean \pm SD	-4.1 \pm 6.0	-3.0 \pm 4.9	-3.2 \pm 4.2	-3.8 \pm 6.9	0.105
APRI, mean \pm SD	0.20 \pm 0.09	0.19 \pm 0.06	0.19 \pm 0.11	0.18 \pm 0.07	0.034*

GHT, gestational hypertension; PE, preeclampsia; SPE, severe preeclampsia; NLR, neutrophil lymphocyte ratio; PLR, platelet lymphocyte ratio; PDW, platelet distribution width; DNI, delta neutrophil index; APRI, aspartate aminotransferase platelet ratio index; SD, standard deviation.

Table

Table 7. Multiple logistic regression analysis between the control and SPE groups.

	OR (95% CI)	p-value
PLR \geq 116	0.983 (0.743-1.300)	0.904
PDW \geq 53	1.381 (1.043-1.830)	0.024*
APRI \geq 0.187	1.432 (1.060-1.935)	0.019*

SPE, severe preeclampsia; OR, Odds ratio; CI, confidence interval; PLR, platelet lymphocyte ratio; PDW, platelet distribution width; APRI, aspartate aminotransferase platelet ratio index.

Table

Table 1. Comparison of the study groups by their general demographic and clinical characteristics.

	Control n=792	GHT n=641	PE n=208	SPE n=364
Age, mean \pm SD	27.0 \pm 5.3*	30.0 \pm 6.4*	28.0 \pm 6.1*	30.0 \pm 6.6*
BMI, mean \pm SD	28.4 \pm 4.1*	32.5 \pm 5.4*	32.7 \pm 6.0*	32.6 \pm 5.7*
Gravida, median (IQR)	2 (1-3) *	2 (1-4) *	2 (1-3) *	2 (1-3) *
Gestational week at hospitalization, mean \pm SD	37.9 \pm 3.6*	36.6 \pm 3.8*	34.8 \pm 4.0*	35.1 \pm 3.9*
SBP at hospitalization, mean \pm SD	105.0 \pm 4.9*	144.0 \pm 6.5*	147.0 \pm 7.3*	165.0 \pm 15.3*
DBP at hospitalization, mean \pm SD	73.0 \pm 1.6*	94.0 \pm 6.0*	95.0 \pm 6.6*	103.0 \pm 10.0*
MAP at hospitalization, mean \pm SD	83.0 \pm 1.5*	110.0 \pm 5.2*	112.0 \pm 5.7*	124.0 \pm 10.4*

IQR, interquartile percentile; SD, standard deviation; SBP, systolic blood pressure; DBP, diastolic blood pressure; MAP, mean arterial pressure; GHT, gestational hypertension; PE, preeclampsia; SPE, severe preeclampsia; BMI, body mass index.

* p-value<0.001

Table 2

Table 2. Comparison of the study groups in terms of tested laboratory parameters at diagnosis.

	Control n=792	GHT n=641	PE n=208	SPE n=364	p-value
NLR, mean \pm SD	4.51 \pm 1.89	4.16 \pm 1.63	3.85 \pm 1.56	4.57 \pm 3.03	<0.001*
PLR, mean \pm SD	132.5 \pm 59.5	136.6 \pm 47.1	130.4 \pm 55.7	121.6 \pm 52.9	<0.001*
PDW, mean \pm SD	54.2 \pm 7.4	55.3 \pm 8.3	55.2 \pm 7.8	56.7 \pm 8.8	<0.001*
DNI, mean \pm SD	-2.46 \pm 3.91	-3.02 \pm 6.00	-3.03 \pm 3.67	-2.83 \pm 3.60	0.125
APRI, mean \pm SD	0.23 \pm 0.09	0.23 \pm 0.11	0.24 \pm 0.15	1.41 \pm 9.36	<0.001*

GHT, gestational hypertension; PE, preeclampsia; SPE, severe preeclampsia; NLR, neutrophil lymphocyte ratio; PLR, platelet lymphocyte ratio; PDW, platelet distribution width; DNI, delta neutrophil index; APRI, aspartate aminotransferase platelet ratio index; SD, standard deviation.

Table 3. ROC results between the control and GHT groups.

	Cut-off	AUC (95% CI)	Sensitivity (%)	Specificity (%)	p-value
NLR	3.55	0.544 (0.512-0.575)	65	39	0.007*
PDW	53	0.542 (0.509-0.574)	66	40	0.011*

GHT, gestational hypertension; AUC, area under the curve; CI, confidence interval; NLR, neutrophil lymphocyte ratio; PDW, platelet distribution width.

Table.

Table 4. Multiple logistic regression analysis between the control and GHT groups.

	OR (95% CI)	p-value
NLR \geq 3.55	0.853 (0.677-1.073)	0.175
PDW \geq 53	1.282 (1.022-1.608)	0.032*

GHT, gestational hypertension; OR, Odds ratio; CI, confidence interval; NLR, neutrophil lymphocyte ratio; PDW, platelet distribution width.

Table 5. ROC results between the control and PE groups.

	Cut-off	AUC (95% CI)	Sensitivity (%)	Specificity (%)	p-value
NLR	3.55	0.618 (0.572-0.664)	65%	51%	<0.001*

PE, preeclampsia; AUC, area under the curve; CI, confidence interval; NLR, neutrophil lymphocyte ratio.

Table 6. ROC results between the control and SPE groups.

	Cut-off	AUC (95% CI)	Sensitivity (%)	Specificity (%)	p-value
PLR	116	0.554 (0.515-0.592)	55	50	0.005*
PDW	53	0.593 (0.556-0.630)	65	44	<0.001*
APRI	0.187	0.621 (0.582-0.660)	71	40	<0.001*

SPE, severe preeclampsia; AUC, area under the curve; CI, confidence interval; PLR, platelet lymphocyte ratio; PDW, platelet distribution width; APRI, aspartate aminotransferase platelet ratio index.

SS-105 [Obstetri Genel]

The effect of the story of preeclampsia or gestational diabetes mellitus diseases on endothelial function

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OBJECTIVE: Flow-mediated dilation (FMD) is a good ultrasonographic marker of early atherosclerotic changes used to measure endothelial function, showing the vasodilation response of peripheral arteries against physical stimuli. Endothelial dysfunction is an important predictor of future cardiovascular disease (CVD) development. In this study; We investigated whether there is an increased risk of cardiovascular disease in patients with a history of preeclampsia or gestational diabetes mellitus by evaluating Flow-mediated dilatation (FMD), which is an indicator of endothelial functions.

Material METHODS: Our study was carried out with 104 patients who gave birth in Bolu Abant İzzet Baysal University Training and Research Hospital between January 2016 and January 2017. Three groups were formed as thirty-four patients with a history of PE, 37 patients with a history of gestational DM, 33 patients with normally pregnancy follow-up and no pregnancy complications among the patients who passed at least 24 months after birth. It was designed as a case control study.

RESULTS: When all three groups were compared in terms of FMD (%), the average of the patient group with preeclampsia history; 9.8 ± 3.1 , the mean of the patient group with GDM history; 10.32 ± 2.50 , control group patient mean; It was determined as 13.19 ± 3.03 . A statistically significant difference was found between the control group and GDM and preeclampsia groups in terms of FMD change (%) ($p < 0.001$). There was a significant negative correlation with FMD change (%) values and the amount of systolic blood pressure, diastolic blood pressure, glucose, LDL, total cholesterol, and proteinuria.

CONCLUSION: The use of these measurements can be used as a predictive marker for cardiovascular disease in patients with a history of GDM and pre-eclampsia, and early risk determination can be time-saving in terms of taking precautions. Demonstrating that GDM and pre-eclampsia cause increased cardiovascular risk later in women's lives will raise awareness about taking measures to reduce risk in this group of patients

Keywords: Preeclampsia, gestational diabetes, flow-mediated dilatation

Cardiovascular risk markers

	Patients with a history of preeclampsia	Patients with a history of GDM	Control group	P value
Systolic blood pressure	121.3 \pm 16.3	116.1 \pm 16.48	111.9 \pm 12.63	<0.001**
Diastolic blood pressure	78.6 \pm 5.9	76.91 \pm 5.30	71.67 \pm 7.04	<0.001**
Glucose	79.5 \pm 7.3	84.78 \pm 7.20	79.94 \pm 5.34	0.007*
HbA1c	5.1 \pm 0.3	5.62 \pm 0.27	5.01 \pm 0.36	<0.001**
LDL	138.54 \pm 1.8	128.40 \pm 36.57	117.00 \pm 17.31	0.087
HDL	49.7 \pm 10.2	50.48 \pm 16.51	53.03 \pm 14.14	0.39
VLDL	104 \pm 17.5	113.78 \pm 15.62	107.48 \pm 17.71	0.163
Total cholesterol	219.83 \pm 2.6	201.18 \pm 48.15	198.14 \pm 20.90	0.115
Triglyceride	108 \pm 11.0	164.35 \pm 86.08	141.00 \pm 74.24	0.005*
FMD change (%)	9.8 \pm 3.1	10.32 \pm 2.50	13.19 \pm 3.03	<0.001**

Cardiovascular risk markers by groups (Physical examination, laboratory, ultrasound parameters)

Demographic Findings

	Patients with a history of preeclampsia	Patients with a history of GDM	Control group	P value
Age	25.35 ± 2.67	25.41 ± 2.53	26.19 ± 0.1	0.561
Size	162.88 ± 5.08	163.65 ± 5.82	162.7 ± 6.7	0.771
Weight	63.29 ± 7.67	81.30 ± 12.38	70.39 ± 10.06	<0.001
BMI	23.86 ± 2.81	30.25 ± 3.72	26.58 ± 3.50	<0.001
DM in the family	3 (%8.8)	8 (%21.6)	3 (%9.1)	
HT in the family	9 (%26.5)	1 (%2.7)	0 (%)	
DM and HT in the family	1 (%2.9)	4 (%10.9)	2 (%6.1)	0.082
No family history	21 (%61.8)	24 (%64.9)	28 (%84.8)	
Job				
Housewife	14 (%41.2)	17 (%45.9)	15 (%45.5)	
Officer	10 (%29.4)	10 (%27)	8 (%24.2)	0.889
Worker	10 (%29.4)	10 (%27)	10 (%30.3)	

GDM History, pre-eclampsia history and demographic findings of the control group.

obstetric data from previous pregnancies

	Patients with a history of preeclampsia	Patients with a history of GDM	Control group	P value
Age	25.35 ± 2.67	25.41 ± 2.53	26.19 ± 0.1	0.561
Size	162.88 ± 5.08	163.65 ± 5.82	162.7 ± 6.7	0.771
Weight	63.29 ± 7.67	81.30 ± 12.38	70.39 ± 10.06	<0.001
BMI	23.86 ± 2.81	30.25 ± 3.72	26.58 ± 3.50	<0.001
DM in the family	3 (%8.8)	8 (%21.6)	3 (%9.1)	
HT in the family	9 (%26.5)	1 (%2.7)	0 (%)	
DM and HT in the family	1 (%2.9)	4 (%10.9)	2 (%6.1)	0.082
No family history	21 (%61.8)	24 (%64.9)	28 (%84.8)	
Job				
Housewife	14 (%41.2)	17 (%45.9)	15 (%45.5)	
Officer	10 (%29.4)	10 (%27)	8 (%24.2)	0.889
Worker	10 (%29.4)	10 (%27)	10 (%30.3)	

GDM history, pre-eclampsia history, and obstetric data from previous pregnancies of the control group

SS-107 [infertilité]

A novel experimental rat model of adenomyosis using Sampson's Retrograde Menstrual Theory and intermittent needle insertion technique

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Aim: Adenomyosis is a benign pathologic condition of the uterine endometrial tissues in which endometrial components such as glands and stroma infiltrate the myometrium. There are validated models of adenomyosis induced systemically by several hormonal treatments, including prolactin, progesterone, synthetic progestins, various estrogenic compounds, and tamoxifen. We developed a new experimental rat model of adenomyosis using combination of Sampson's Retrograde Menstrual Theory and intermittent needle insertion technique in the present study.

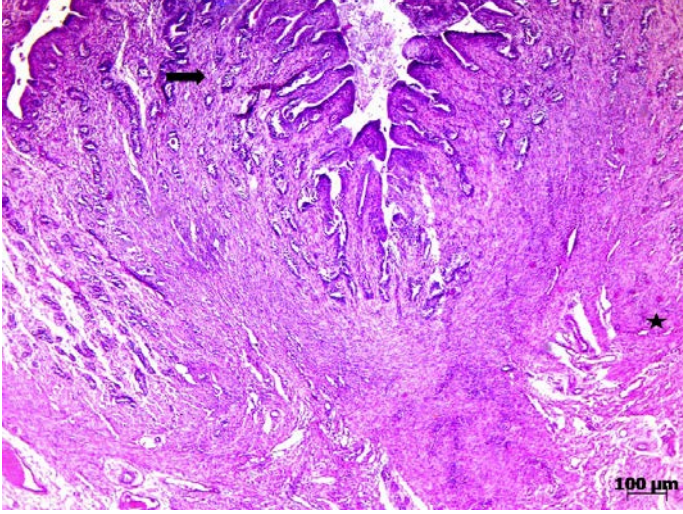
Methods: We conducted the study at the Experimental Animal Laboratory, Ankara University Faculty of Medicine. Two anesthetized four-week-old female Wistar-Albino virgin rats, 250-300g in weight, were divided randomly into control and experimental groups. Rats were kept in a climate-controlled facility at a temperature of 24°C and on a 12-hour light/12-hour darkness cycle each day. Rats were provided standard diets. A midline laparotomy was performed on the experimental group rat, and the distal end of the uterus was punctured with a 20G needle. A blunted 20G needle was inserted into the uterine cavity and scratched the endometrial surface several times. Uterine tissue was damaged by intermittent anteroposterior needle insertion at 5mm intervals with a 20G needle. The microscopic morphology of uterine sections was compared seven days later. At the end of the protocol, the sections staining standard hematoxylin and eosin of the uterine horns were examined under a light microscope and a light microscope at x5 and x10 magnification.

Results: The control group uterine tissue section stained with Hematoxylin-Eosin was evaluated individually under the light microscope for histological examination, demonstrating that the uterus had a typical histological structure. On the other hand, in the histological examination of the experimental group uterine tissue section, gland structures were observed at the border of the myometrium.

Conclusion: The presented technique may be cost effective and less time consuming when compared to current models using hormonal therapies. Intermittent needle insertion technique in combination with Sampson's Retrograde Menstrual Theory may have a part in creating experimental adenomyosis model. However, the experimental efficiency should be compared to verified procedures for more substantial proof. Consequently, a novel practical rat model of adenomyosis has been constructed to mimic human histopathology and offer an innovative research technique.

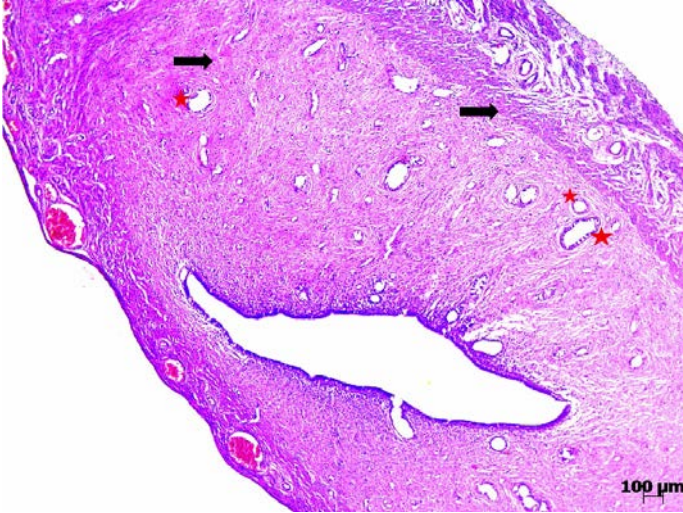
Keywords: Adenomyosis, Animal models, Wistar Albino rats

Fig.1



Uterine tissue findings from the control group rat; endometrium (arrow), myometrium (asteriks) (Hematoxylin Eosin. X10)

Fig.2



Uterine tissue findings from the experimental group rat; myometrium (arrow), gland structures (asteriks) (Hematoxylin Eosin. X5)

SS-108 [İnfertilite]

Treatment of ovarian damage induced by chemotherapeutic drugs in female rats with G-CSF and platelet-rich plasma (PRP)

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Objective: The structure and function of the ovaries are two very important factors for female infertility. Use of cytotoxic drugs cause serious structural and functional disorders on the ovaries. In our study, subject models will be created by taking advantage of the ovarian failure side effect of cyclophosphamide. After ovarian insufficiency is created with cyclophosphamide, a chemotherapeutic drug, in the ovaries of the rats, the structural and functional improvement on the ovarian tissue will be examined by administering G-CSF and platelet-rich plasma (PRP) from the peripheral blood of the rats. Our aim in the project is to evaluate the effect of G-CSF and PRP on improving ovarian damage and fertility in fertile rats with ovarian failure with cyclophosphamide.

Material and Methods: This was prospective, randomized, controlled study between July 2021 and January 2022 and animal experimentation ethics committee was taken in May 2021. 48 rats were used in the study. The subjects were divided into 7 groups of 6 each. Apart from these, a group of 6 rats was used only to obtain peripheral blood to obtain PRP. In order to obtain PRP, the blood of the rats allocated for this group was drawn from the heart with the help of a needle and taken into tubes and centrifuged at 400 rpm for 10 minutes. After the first centrifugation, the upper part was centrifuged again at 800 rpm for 10 minutes. After the second centrifugation process, 2/3 of the top of the tube is called platelet-poor plasma, and the part of the bottom 1/3 is called PRP. This PRP obtained can be stored at -20. Agents were administered to all subject groups intraperitoneally on days 0, 7, and 14 of the experiment, and rats were sacrificed on day 21. On the 21st day of the experiment, before the rats were sacrificed, blood samples were taken from each group and AMH levels were measured. After the sacrifice process, both ovarian tissues of the rats were taken for immunohistochemical examination. AMH positive follicle count was made from one of the ovaries by immunohistochemical examination. Protein analysis was performed from the other ovary by PCR and FACS technique.

Results: A significant difference was found in the primordial, secondary, antral, and atretic follicle counts between all groups ($p < 0.01$). Group 2 has the lowest primordial, secondary, and antral and the highest atretic follicle count. The primordial, primary, and antral follicle counts were significantly higher in groups 4,5,6 and 7 compared with group 2 ($p = 0.001$, $p = 0.0007$, and $p = 0.02$, $p = 0.02$ respectively). AMH positive staining primary follicle count was highest in group 2, lowest in group 4. Serum AMH levels was lowest in group 2, highest in group 3

Conclusion: Unlike previous studies with similar models, in our study, samples taken from the subjects were examined in detail immunohistochemically, detailed protein analysis was performed using PCR and FACS technique, and in the light of these data, more objective data on tissue regeneration in rats treated with PRP, G-CSF and both were presented.

Keywords: Platelet-rich plasma, G-CSF, cyclophosphamide, ovarian insufficiency

Table 1

Variables	Group 1 (NaCl)	Group 2 (Cy)	Group 3 (Cy+PRP)	Group 4 (PRP)	Group 5 (G-CSF)	Group 6 (Cy+G-CSF)	Group 7 (Cy+PRP+G-CSF)
Primordial Follicle Count*	184,7±54	63,2±13,1	167±46,9	197±39	188,5±42,4	159,6±55,1	169±52,7
Secondary Follicle Count**	27,2±9,3	12,2±3,3	25,3±6,8	29,8±3,5	26,8±4,9	25,2±9,4	28,5±2,1
Antral Follicle Count***	22,7±8,1	12,3±3,2	21±4,8	25,8±6,1	23,3±7,1	19,6±6	22,5±8,8
Atretic Follicle Count#	4,2±1,9	10,5±3	3,7±1,2	3,2±1,7	3,8±0,8	4,4±1,1	3,8±1,3
AMH (+) Staining Primary Follicle Count##	4,2±1,9	10,5±3	3,7±1,2	3,3±1,7	3,8±0,8	4,4±1,1	3,8±1,3
Serum Concentration of AMH###	2±0,4	0,9±0,2	1,9±0,5	2,2±0,4	2,1±0,4	1,8±0,3	1,9±0,3

According to Tukey's multiple comparison test; *NaCl vs Cy $p=0.001$, Cy vs Cy+PRP $p=0.006$, Cy vs PRP $p=0.001$, Cy vs G-CSF $p=0.002$, Cy vs Cy+PRP+G-CSF $p=0.002$ **NaCl vs Cy $p:0.006$, Cy vs Cy+PRP $p:0.002$, Cy vs PRP $p=0.003$, Cy vs G-CSF $p:0.007$, Cy vs Cy+G-CSF $p=0.03$, Cy vs Cy+PRP+G-CSF $p=0.007$ *** NaCl vs Cy $p:0.003$, Cy vs Cy+PRP $p:0.02$, Cy vs PRP $p=0.0004$, Cy vs G-CSF $p:0.002$, Cy vs Cy+G-CSF $p=0.13$, Cy vs Cy+PRP+G-CSF $p=0.02$ # NaCl vs Cy $p<0.0001$, Cy vs Cy+PRP $p<0.0001$, Cy vs PRP $p<0.0001$, Cy vs G-CSF $p<0.0001$, Cy vs Cy+G-CSF $p<0.0001$, Cy vs Cy+PRP+G-CSF $p<0.0001$ ## NaCl vs Cy $p<0.0001$, Cy vs Cy+PRP $p<0.0001$, Cy vs PRP $p<0.0001$, Cy vs G-CSF $p<0.0001$, Cy vs Cy+G-CSF $p<0.0001$, Cy vs Cy+PRP+G-CSF $p<0.0001$ ### NaCl vs Cy $p<0.0004$, Cy vs Cy+PRP $p:0.004$, Cy vs PRP $p=0.0003$, Cy vs G-CSF $p:0.002$, Cy vs Cy+G-CSF $p=0.02$, Cy vs Cy+PRP+G-CSF $p=0.02$

SS-109 [Jinekoloji Genel]

The Role of Trimetazidine in Ischemia/Reperfusion Damage Treatment in an Ovary Torsion Model Experimentally Induced in Rats

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OBJECTIVE: Adnexial torsion is the most common gynecological emergency and there are no specific clinical, laboratories, or radiological findings for adnexial torsion. Unfortunately, the currently accepted treatment is adnexial detorsion. Cytoprotective effects of Trimetazidine

(TMZ), an antianginal drug, are well-defined and has been demonstrated to improve oxidative stress markers and limits membrane damage induced by reactive oxygen species and protects tissues from free radicals with its antioxidant effects. This experimental animal study was aimed to investigate the histopathological and biochemical efficacy of trimetazidine (TMZ) in decreasing ovary damage in an ovary ischemia/reperfusion (I/R) model in the rat.

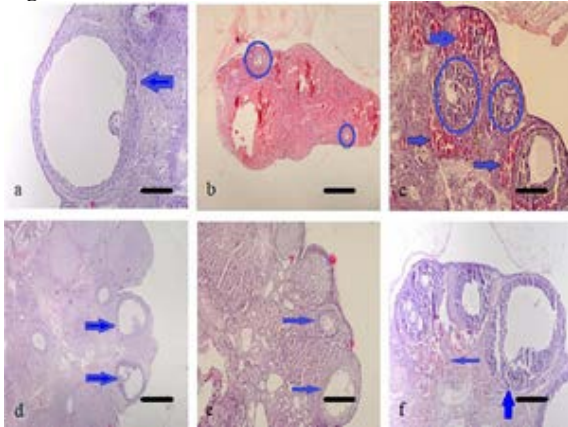
METHODS: A total of 35 Wistar albino female rats were randomly separated into five groups, n=7 per group: Group 1: Sham (S) was only given a laparotomy procedure. Group 2: Ischemia (I) group with 2-hour ischemia using a vascular suture. Group 3: Ischemia/Reperfusion (I/R) group with 2 hour ischemia and 2-hour reperfusion. Group 4: Sham+10 mg/kg orally TMZ (S+TMZ). Group 5: I/R+10 mg/kg oral TMZ (I/R+TMZ) group with 2 hours ischemia and 2 hours reperfusion after the administration orally 10 mg/kg oral TMZ. Two daily doses of TMZ were orally administered to Group 4 (S+TMZ) and Group 5 (I/R+TMZ) for three days.

RESULTS: The edema, vascular congestion, hemorrhage, follicle degeneration, and PMNL infiltration were decreased (Figure 1). The histopathological damage scores of edema, congestion, hemorrhage, PMNL infiltration, and follicle degeneration by workgroups are displayed in Table 1. According to these scores, the minimum damage score was observed in group (sham) and the maximum damage score was observed in groups 2 (Ischemia group) and 3 (Ischemia /Reperfusion group). It was found that all these parameters showed a statistically significant difference between the groups ($p<0.05$). The edema was absent and the congestion score was the lowest in group 1 (Sham). Hemorrhage was lowest in groups 1 (Sham) and 4 (Sham+TMZ), and PMNL infiltration was not observed at all in group 5 (I/R+TMZ). While the follicle degeneration was not observed in group 1 (Sham), it was the highest score in group 2 (Ischemia group). A statistically significant different score of the edema ($p<0.001$, $p=0.005$), vascular congestion ($p=0.018$, $p=0.018$), hemorrhage ($p=0.005$, $p=0.005$), and follicular degeneration ($p<0.001$, $p=0.021$) was present in groups 2 (Ischemia group) and 3 (Ischemia /Reperfusion group) compared to group 1 (Sham). In group 5 (I/R+TMZ), where we investigated the effect of TMZ on ischemia and reperfusion injury, PMNL infiltration ($p=0.021$), congestion ($p=0.018$) and hemorrhage ($p=0.018$) scores were significantly lower compared to group 3 (Ischemia /Reperfusion group). However, although edema and follicle degeneration scores were lower in group 5 (I/R+TMZ), compared to group 3 (Ischemia /Reperfusion group), they were not statistically significant.

CONCLUSION: TMZ, an anti-ischemic agent, may have protective effects on ovarian ischemia and Ischemia/Reperfusion injury in rats. Ovarian torsion continues to be one of the most important gynecological emergencies, especially due to the difficulties experienced in the diagnosis-treatment process. TMZ can be a versatile alternative both before surgery due to its anti-ischemic effects and after surgery by suppressing inflammation in the ovarian tissue.

Keywords: Ischemia/reperfusion injury, ovarian torsion, rat, trimetazidine

Figure 1.



a) A normal histopathological structure is observed in Group 2 ovary sample. A normal Graff Follicle (blue arrow). Hematoxylin and eosin (H&E), 100x, scale bar = 100 μ m; b) In Group 2, a severe spread hemorrhage in ovary, a decomposition among the cuboidal cells surrounding the follicle and follicle degeneration covering the granulosa cells falling in follicular cavity (blue circles) H&E, 40x, scale bar = 400 μ m; c) In Group 3, vascular congestion observed (blue arrows), mild hemorrhage (thick blue arrow), degradation of cuboidal cells surrounding the follicle and mild follicle degeneration covering granulosa cells falling in follicular cavity (blue circles) H&E, 100x, scale bar = 200 μ m; d) In Group 4, Normal ovary histology (normal follicles, corpus luteum, cortex, medulla and hilar structure) (blue arrows) H&E, 40x, scale bar = 400 μ m; e) In Group 5, normal follicles in ovary (blue arrows) H&E, 100x, scale bar = 200 μ m; f) In Group 5, mild hemorrhage observed in ovary (blue arrow) and normal follicles, H&E, 100x, scale bar = 100 μ m.

Table 1. Comparison of the histopathological damage scores among the groups.

Histopathological features	Grade	Sham (Group 1) n (%)	Ischemia (Group 2) n (%)	Ischemia / Reperfusion (Group 3) n (%)	Sham+TMZ (Group 4) n (%)	Ischemia / Reperfusion +TMZ (Group 5) n (%)	p
Edema	0	7 (100)	-	1 (14.3)	5 (71.4)	1 (14.3)	<0.001*
	1	-	6 (85.7)	3 (42.9)	2 (28.6)	6 (85.7)	
	2	-	1 (14.3)	3 (42.9)	-	-	
Vascular congestion	0	4 (57.1)	-	-	5 (71.4)	4 (57.1)	0.028*
	1	3 (42.9)	-	1 (14.3)	2 (28.6)	3 (42.9)	
	2	-	3 (42.9)	5 (71.4)	-	-	
	3	-	4 (57.1)	1 (14.3)	-	-	
Hemorrhage	0	6 (85.7)	-	-	5 (71.4)	4 (57.1)	0.001*
	1	1 (14.3)	2 (28.6)	3 (42.9)	2 (28.6)	3 (42.9)	
	2	-	1 (14.3)	2 (28.6)	-	-	
	3	-	4 (57.1)	2 (28.6)	-	-	
PMNL	0	4 (57.1)	1 (14.3)	2 (28.6)	6 (85.7)	7 (100)	0.004*
	1	3 (42.9)	6 (85.7)	4 (57.1)	1 (14.3)	-	
	2	-	-	1 (14.3)	-	-	
Follicle degeneration	0	7 (100)	-	1 (14.3)	6 (85.7)	5 (71.4)	0.004*
	1	-	3 (42.9)	3 (42.9)	1 (14.3)	2 (28.6)	
	2	-	2 (28.6)	3 (42.9)	-	-	
	3	-	2 (28.6)	-	-	-	

PMNL: Polymorphonuclear leukocytes. *Edema= groups 1 vs 2 ($p<0.001$), groups 1 vs 3 ($p=0.005$), groups 1 vs 4 ($p=0.021$), and groups 1 vs 5 ($p=0.005$) are statistically significant. *Congestion= groups 1 vs 2 ($p=0.018$), groups 1 vs 3 ($p=0.018$), groups 2 vs 4 ($p=0.021$), groups 3 vs 4 ($p=0.021$), and groups 3 vs 5 ($p=0.018$) are statistically significant. *Hemorrhage = groups 1 vs 2 ($p=0.005$), groups 1 vs 3 ($p=0.005$), groups 2 vs 4 ($p=0.021$), groups 3 vs 4 ($p=0.021$), and groups 3 vs 5 ($p=0.018$) are statistically significant. *PMNL= groups 2 vs 5 ($p=0.005$) and groups 3 vs 5 ($p=0.021$) are statistically significant. *Follicular degeneration: groups 1 vs 2 ($p<0.001$), groups 1 vs 3 ($p=0.021$), groups 2 vs 4 ($p=0.005$), and groups 3 vs 4 ($p=0.018$) are statistically significant.

Table 2. Comparison of the laboratory parameters among the groups.

	Sham (Group 1)	Ischemia (Group 2)	Ischemia + Reperfusion (Group 3)	Sham + Trimetazidine (Group 4)	Ischemia/ Reperfusion + Trimetazidine (Group 5)	p
MDA	20.52 \pm 5.22	37.49 \pm 8.24	28.92 \pm 6.56	27.14 \pm 3.90	28.02 \pm 10.37	0.004*
TAS	0.58 \pm 0.13	0.70 \pm 0.27	0.66 \pm 0.26	1.00 \pm 0.13	0.55 \pm 0.21	0.004*
TOS	5.71 \pm 1.76	14.54 \pm 6.93	14.88 \pm 7.92	9.17 \pm 2.64	11.24 \pm 4.68	0.016*
OSI	1016.89 \pm 361.04	1987.35 \pm 349.20	2137.14 \pm 435.24	915.00 \pm 250.89	2001.99 \pm 317.13	<0.001*

MDA: malonaldehyde, TAL: Total antioxidant level, TOL: Total oxidant level, OSI: Oxidative Stress Index, PMNL: polymorphonuclear leukocytes. *MDA= groups 1 vs 2 ($p=0.009$) is statistically significant. *TAS= groups 1 vs 4 ($p=0.001$) and groups 4 vs 5 ($p=0.008$) are statistically significant. *TOS= groups 1 vs 2 ($p=0.041$), and groups 1 vs 3 ($p=0.033$) are statistically significant. *OSI= groups 1 vs 2 ($p=0.001$), groups 1 vs 3 ($p=0.004$), groups 1 vs 5 ($p=0.001$), groups 2 vs 4 ($p=0.001$), groups 3 vs 4 ($p=0.001$), and groups 4 vs 5 ($p=0.001$) are statistically significant.

SS-110 [Jinekoloji Genel]

Krill Oil decreases cisplatin induced ovarian damage and preserves ovarian reserve via NrF2, TLR-4, NLRP-3 pathway

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AIM: To study (1) ovarian damage caused by cisplatin and (2) the effects of Krill Oil on ovarian failure and follicular reserve in cisplatin induced rats. **METHODS:** This study consisted 21 female rats randomly separated into three groups. Cisplatin (20 mg/kg) was intraperitoneally administered twice a week for four weeks (n=14). No drug was administered to the remainder of rats (n=7) (Control Group). Cisplatin administered 14 rats were randomly divided into two groups. Saline (1 ml/kg/day) was given by oral gavage to Cisplatin Vehicle Group (n=7), and Krill oil (4 ml/kg/day) was given by oral gavage to Krill Oil+Cisplatin Group (n=7) for four weeks. Bilateral oophorectomy was performed for histopathological evaluation and blood samples were collected after four weeks. **RESULTS:** Cisplatin caused ovarian fibrosis ($p<0.0001$). Ovarian Toll-like Receptor-4 (TLR-4), ovarian NOD-LRR and Pyrin domain containing protein-3 (NLRP-3), plasma Tumor Necrosis Factor- α (TNF- α) and malondialdehyde (MDA) levels were higher (respectively, $p<0.0001$, $p<0.0001$, $p<0.0001$, $p<0.05$), whereas primordial, primary and secondary follicle count, ovarian Nuclear Factor Erythroid-2 (NrF-2) and plasma Anti-Müllerian Hormone (AMH) levels were lower in Cisplatin Vehicle Group ($p<0.05$). These findings reflected the cisplatin damage in the ovaries and diminished ovarian reserve occurred via fibrosis, severe inflammation and oxidative stress. Krill Oil improved the histopathological fibrosis in the ovaries

($p < 0.05$). There was a concomitant decrease of TNF- α , MDA, NLRP-3 and TLR-4 and increase of NrF-2 levels with Krill Oil ($p < 0.05$). Krill Oil also improved ovarian reserve with higher AMH levels and primordial, primary, secondary follicle count ($p < 0.05$). CONCLUSIONS: The several unfavoured changes in the ovaries due to cisplatin have been determined in this present study. Krill Oil with its high omega-3 content might provide ovarian follicular growth, oocyte maturation, physiological ovarian function via NrF2, TLR-4, NLRP-3 pathway.

Keywords: Omega-3, Krill Oil, Cisplatin, Ovarian Function/Menstrual Disorders, Reproductive Endocrinology and Infertility

SS-111 [Infertilité]

Stem cell treatment in an animal model with cell sheet method in premature ovarian insufficiency

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Objective: Premature ovarian insufficiency (POI) is defined as the development of hypergonadotropic hypogonadism so before the age of 40 and definitive treatment is absent. However, preliminary animal studies suggest that stem cells might be feasible candidates to promote ovarian rejuvenation. Nevertheless, cell sheet is a new technology which forms a layer of stem cells without using a scaffold. In the current study, we aimed to compare the efficacy of cell sheet method with intravenous (IV) application of stem cells in POI among an animal model.

Method: In the current prospective animal study, 6–8-week-old Sprague dawley rats were used and four arms were generated. (i) only-POI arm ($n = 10$) generated by cyclophosphamide (200mg/kg for 1/week, total 2 weeks), (ii) POI arm ($n = 10$) treated via IV stem cell, (iii) POI arm ($n = 10$) treated via cell sheet method and (iv) control arm in which only SF was administered instead of cyclophosphamide.

After one week from the last dose of cyclophosphamide, FSH was examined to confirm POI in all arms. Laparotomy was performed in all arms, but cell sheet was administered only in the 3rd arm. Twenty-one days after the laparotomy, all rats were sacrificed, oophorectomy was performed, intracardiac blood were taken. Immunohistochemical examination was done, gene expressions of GDF9 and BMP15 were examined, FSH and AMH were measured in serum samples. SPSS 21.0 was used for statistical analysis.

Results: In the light microscopic examination with hematoxylin-eosin, totally atresia was shown at preantral and antral stages in the

1st arm whereas folliculogenesis represented normal distribution in the 4th arm which reflects the controls. In the 2nd arm, although partially decreased atresia was apparent, multi oocytes follicles were the most remarkable finding. In the 3rd arm, most of the follicles presented normal morphology. For GDF9 immunoreactivity, whereas a decreased immunoreactivity was noticed both in 1st and 2nd arms, GDF9 involvement was similar between 3rd and 4th arms. For BMP-15 immunoreactivity, in the 3rd and 4th arms, it was weak in preantral and antral follicles but gradually became powerful until the stage of dominant follicles. However, immunoreactivity was weak in all stages in the 1st and 2nd arms. Gene expressions of BMP15 and GDF9 was parallel to the findings that had been observed in immunohistochemical staining.

Conclusion: The current attempt represents a pioneer study in the literature in which cell sheet method was used for the first time in a POI model. Although any stem cell applying methods were effective to prevent atresia of follicles to a certain degree, cell sheet method was more effective than IV-stem cell method as demonstrated with immunohistochemical staining and gene expression plus not applying stem cells in the systemic circulation. In addition, follicles were also comparable in cell sheet method with controls which was not achieved in IV-stem cell arm which had multi-oocyte follicles. Those results suggest that cell sheet method might be a feasible and efficient method for the stem cell treatment of models with POI and might be a new treatment approach in POI.

Keywords: animal model, cell sheet, premature ovarian insufficiency, stem cell

SS-112 [Infertilité]

Transplantation of Autologous Bone Marrow Mononuclear Cells (aBM-MNCs) Improves Endometrium in Patients with refractory Asherman's syndrome

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AIM: To evaluate the effect of transplantation of aBM-MNCs on the function of endometrium in patients with refractory Asherman's syndrome

Study design: Prospective

MATERIAL-METHODS: The study was carried out on patients of age <45 years with oligo/amenorrhea and primary or secondary infertility due to refractory Asherman's syndrome and / or thin endometrium, in whom standard treatment options had failed. Bone marrow of the patients was extracted by puncture of sacrum under

local anesthesia and used as a source for aBM-MNCs. aBM-MNCs were separated according to generic volume reduction protocol. The number of viable CD34+ cells and their viability was measured by flow cytometry. Half of the harvested aBM-MNCs was implanted transmyometrially into the subendometrial zone by an ovum aspiration needle under general anaesthesia. A maximum volume of 3,5 ml was delivered at 5-8 sites around uterine cavity. The second half of the aBM-MNCs product was cryopreserved below -150 °C, which was thawed and implanted in the same setting one week after the first procedure. Patients were given oral oestradiol valerate tablets preoperatively (6 mg/day) which continued 6 to 8 weeks. All participants were followed-up at 3 months interval. Outcome criteria were changes in menstrual blood flow, maximum mid-cyclic endometrial thickness (ET), and gestations. The study was approved by the Institutional Ethics committee. An informed written consent was obtained.

RESULTS: Twenty patients aged <45 years (median \pm SD; 35 \pm 5,34) with infertility and refractory Asherman's syndrome or thin endometrium were enrolled into the study between 2017 and 2020. The median number of embryo transfers before the study was 3 \pm 1 (median \pm SD). The average number of implanted CD34+ cells were 6,87X106 and 5,73 X 106 (in the first and second procedures, respectively). No complications were observed.

Four patients were lost during follow-up. Two had persisting thin endometrium and serometra, which did not improve after the procedures. Ten patients have noted that, there was an increase in their menstrual blood following the procedure. However, this effect diminished within 9 to 12 months following the procedures.

The average postoperative maximum endometrial thickness was significantly higher than the average preoperative maximum endometrial thickness 5.76 \pm 1.19 vs. 2.97 \pm 0.48 (p<0.01; Student t test).

Twelve patients had frozen-thaw embryo transfers after the procedures. The number of embryo transfer was 1 \pm 1 (median \pm SD) after the procedures. 8 patients had blastocyst transfers and 4 had embryos transferred in cleavage status.

In 42 % (n = 5 of 12) of the patients, a pregnancy could be achieved. 1 of the patients delivered a healthy baby at term. 3 patients had biochemical pregnancy and one had a missed abortion.

CONCLUSIONS: Transplantation of autologous bone marrow mononuclear cells may contribute to endometrial function in patients with refractory Asherman's syndrome. Therapy protocols and patient selection criteria are subject to further trials.

Keywords: Bone marrow, mononuclear cells, stemcell therapy, endometrium, Asherman's syndrome

SS-113 [Jinekoloji Genel]

Role of Telocytes in the Pathogenesis of Ectopic Pregnancy

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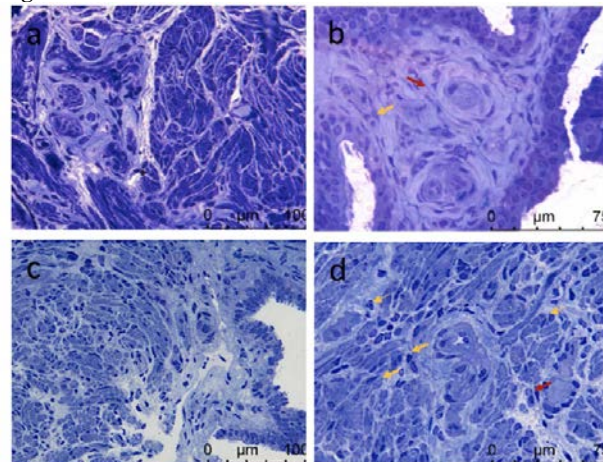
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The aim of this study is to investigate the effect of telocytes on tubal motility in ectopic pregnancies. The study included patients with ectopic pregnancy (n=10) and control patients (n=10) (partial salpingectomy for contraception). Immunohistochemical staining for c-Kit, vimentin, CD34 and S100A was performed to quantify telocytes in the mucosa, muscular layer and serosa of fallopian tubes of control and ectopic pregnancy group. Spontaneous and KCl (80 mM) induced contraction and cumulative progesterone dose-relaxation (10-11-10-5M) and cumulative oxytocin dose-contraction (10-10-10-4M) responses were recorded. There was no difference between the two groups in terms of age, gravida, parity, delivery type and gestational week (p>0.05). Control group exhibited a homogenous distribution of telocytes in the mucosa and muscular layers, while their distribution in the ectopic pregnancy group was heterogeneous. In immunohistochemical staining with vimentin, S100A, c-Kit and CD34, telocyte counts increased in the muscular layer and serosa of the tubal tissues of ectopic pregnancies. Frequency of the spontaneous contractions were higher in the control group (p<0.001), in contrary amplitude of the contractions were higher in ectopic pregnancies (p<0.001). Although, the cumulative oxytocin dose-contraction curves were similar at all concentrations between the groups (p>0.05), the cumulative progesterone dose-relaxation curves were significantly different, with higher relaxation response in the ectopic pregnancy group at all concentrations (p<0.001). We concluded that increased telocyte count in the fallopian tube may decrease tubal motility and may affect the transfer of the blastocyst to the uterus. This may play a role in the pathogenesis of ectopic pregnancy.

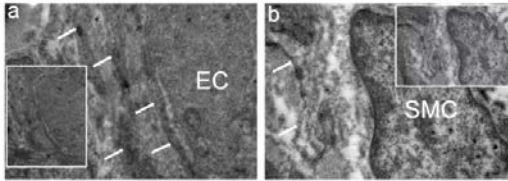
Keywords: Telocytes, Fallopian Tubes, Ectopic Pregnancy, Immunohistochemistry, Smooth Muscle Contraction

Figure 1.



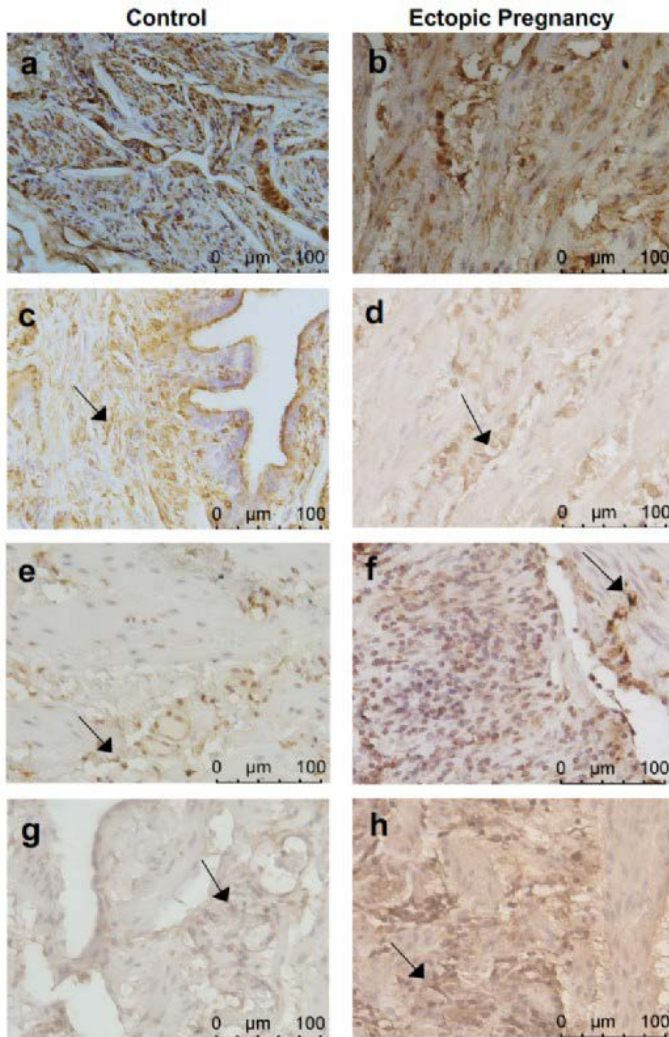
Light micrographs of fallopian tube from control and ectopy pregnancy groups. a (40x) and b (63x) control group, c (40x) and d (63x) ectopic pregnancy group. Yellow arrows indicate nucleus and red arrows indicate thin long cytoplasmic extensions of telocytes (telepods).

Figure 2



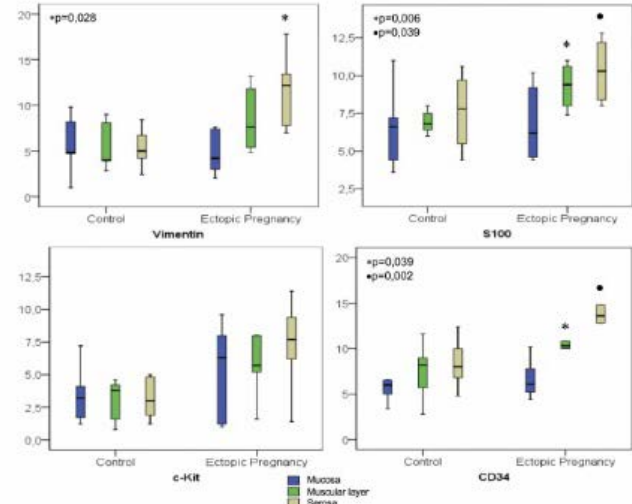
Ultrastructural evaluation of telocytes in ectopic pregnancy group. a: Telocytes with telepods (white arrows) exhibited close contact with endothelial cells (EC) of capillaries. b: Telocytes located between smooth cells (SMC).

Figure 3



Immunohistochemical staining for vimentin, S100A, c-Kit, CD34 in fallopian tubes in control and ectopic pregnancy groups. a, b: vimentin staining; c, d: S100A staining; e, f: C-Kit staining; g, h: CD34 staining. Arrows indicate telocytes (40x), counterstained with haematoxylin.

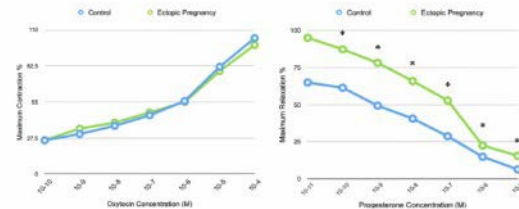
Graphic 1



Graphic 1: Number of telocytes in the mucosa, muscular layer and serosa of the fallopian tubes in the control and the ectopic pregnancy groups.

Number of telocytes in the mucosa, muscular layer and serosa of the fallopian tubes in the control and the ectopic pregnancy groups.

Graphic 2



Graphic 2: Cumulative oxytocin and progesterone response of the fallopian tube stripes in control and ectopic pregnancy patients. *p<0.001.

Cumulative oxytocin and progesterone response of the fallopian tube stripes in control and ectopic pregnancy patients. *p<0.001.

Demographic and clinical findings of the patients.

	Control (n=10)	Ectopic Pregnancy (n=10)	p value
Age (Years)	31.5 (25-41)	38 (30-44)	0.359*
Gravida	5 (2-8)	2 (1-8)	0.070*
Para	2.5 (1-4)	1 (0-4)	0.104*
BMI (kg/m2)	27.2 (21.8-31.6)	22.5 (18.7-27.9)	0.048*
WBC (106/L)	9150 (5700-12000)	7505 (6490-10300)	0.596*
TSH (mIU/L)	2,65 (1,76-6,93)	2,24 (1,62-4,3)	0.058*
Previous Delivery (#)			
Vaginal	4	8	0.170**
Cesarean	6	2	0.170**

Values are given as median (min-max); BMI: Body mass index, WBC: White blood cell, TSH: Tiroid stimulating hormone *Mann Whitney U Test **Fisher's Exact Test

Spontaneous and KCl-Induced Contraction Responses in Control and Ectopic Pregnancy

		Control (n=10)	Ectopic Pregnancy (n=10)	p value
Spontaneous Contraction	Frequency (Hertz)	6.20 (4.90-7.30)	3.60 (2.20-4.50)	<0.001*
	Amplitude (mg/g wet tissue)	0.975 (0.79-1.25)	1.98 (1.20-2.41)	<0.001*
KCl-Induced	Amplitude (mg/g wet tissue)	2.29 (1.80-2.80)	3.45 (2.60-3.88)	<0.001*

Values are given as median (min-max) * Mann-Whitney U test

SS-114 [Jinekoloji Genel]

Can ultrasound probes and coupling gel in gynaecology and obstetrics clinics be the origin of capable bacterial infections? A tertiary care hospital experience

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BACKGROUND: The aim of this study was to evaluate the bacterial contamination rates of ultrasound probes and gel and the nosocomial infection risk associated with them. In this way, we wanted to evaluate the adequacy of our ultrasound probe disinfecting protocols to reduce the risk of hospital-wide infection.

METHODS: Totally 56 swab samples were achieved on transabdominal (TAP) and transvaginal ultrasound (TVP) probe surfaces and connected gel bottles in gynaecology and obstetrics department and were cultured in the microbiology laboratory. In comparison, bacterial contamination in door handles of the rooms (12 swab cultures) were analyzed. These measurements were replicated every week for a month from; hence, each probe was cultured 4 times during the study period.

RESULTS: Eight non-pathogenic microorganisms (Staphylococcus epidermidis, S. hominis, S. haemolyticus, S. lugdunensis, Corynebacterium amycolatum, C. aurimucosum) (14%) common in human skin flora and the environment were isolated from probe cultures. No methicillin-resistant Staphylococcus aureus have isolated but two notable pathogens (Enterobacter cloacae, Escherichia coli) were identified in probs. Non-pathogenic organisms (S. epidermidis, S. cohnii) were isolated from gel cultures. Also, cultures taken from door handles had only non-pathogenic organisms in comparison to ultrasound probes.

CONCLUSIONS: Bacterial contamination was detected on ultrasound probes and gels in obstetrics and gynaecology clinics of our hospital. Although the majority was the non-pathogenic microorganisms (S. epidermidis, S. hominis, S. haemolyticus, S. lugdunensis), two pathogenic microorganisms have also been identified (Enterobacter cloacae, Escherichia coli). TVP are recognized critical instruments due to their interact of mucous membranes. Hospital team should not forget that ultrasonographic probes can be a tool for bacterial infection and

complicate the patient's management. Decontamination of the probe via using dry non-sterile paper towel is a cheap, simple, and effective method which does not damage to device, and can decrease the bacterial load as well. Then high-level disinfection should be applied.

Keywords: bacterial contamination, gel, ultrasound transducers

Isolated microorganisms according to culture sites ultrasound probes (UP) by gynaecology and obstetrics department

Location	1. week	2. week	3. week	4. week
Ultrasound gel in Gynaecology and Obstetrics service UP	-	-	-	-
Gynaecology and Obstetrics service TV USG Probe (above condom)	-	-	-	-
Gynaecology and Obstetrics service TV USG Probe	-	-	S. hominis	-
Gynaecology and Obstetrics service Door handle	-	-	-	S. hominis
Gynaecology and obstetrics service Transabdominal USG Probe	S. epidermidis	S. hominis	-	Corynebacterium amycolatum S. hominis Enterobacter cloacae
Ultrasound gel in Infertility polyclinic	-	S. epidermidis	-	S. cohnii
Infertility polyclinic Door handle	-	-	-	-
Infertility polyclinic TV USG probe	S. haemolyticus	S. epidermidis	S. hominis	Corynebacterium aurimucosum
Infertility polyclinic TV USG probe (Above condom)	-	-	-	-
Infertility polyclinic Transabdominal USG probe	S. epidermidis	S. lugdunensis	S. haemolyticus	S. epidermidis
Ultrasound gel in Oncology polyclinic	-	-	-	-
Oncology polyclinic TV USG Probe	S. epidermidis Escherichia coli	S. epidermidis	-	S. hominis
Oncology polyclinic TV USG Probe (Above Condom)	-	-	-	-
Oncology polyclinic Door handle	-	-	-	S. hominis

SS-115 [Jinekoloji Genel]

2 D Transvaginal Ultrasound (2DTvUSG) Levonorgestrel IUD position in the uterine cavity finding among bleeding and /or pain complaint patients: A cross sectional study

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BACKGROUND: Ultrasonography presents as first-line imaging for the estimation of location IUD position in patients with pelvic pain,

abnormal bleeding. The correctly position in LIUD in the uterine cavity near the fundus. Low position of the IUD may be displaced downwards with Levonorgestrel intrauterine device (LIUD) upper end of the endometrial cavity descending. The objectives of this study were to define the position of the Levonorgestrel intrauterine device (LIUD) in the endometrial cavity with 2D TvUSG, and to compare between groups with or without complaints of bleeding and /or pain.

METHODS: This was prospective cross-sectional trial with LIUD patients for a period of 3 months or longer who attend the Ankara Training and Research Hospital. A vaginal ultrasound was achieved in each woman recorded by one author (NA) using at vaginal probe of 3.5 Mhz (MINDRAY DC-7T model) in the study. The distance of upper end of the vertical arm of LIUD to external uterine fundus, myometrium and endometrium recorded (Fig 1). The Shapiro-Wilk test, Independent Sample T test were used for statistical analyses. Abnormal bleeding and pelvic pain complaints were compared and reviewed between the groups. All $p < 0.05$ were considered significant.

RESULTS: 46 women were enrolled and data for 42 women analyzed. The values of endometrium distances LIUD without complaints was 2.8 mm (%95 CI 1.82-3.92); The curve of values endometrial distances LIUD among women with complaints was 3.8 mm (%95 CI 2.81-4.83). There was no significant differences in the values of measuring TVUSG distances of LIUD endometrium, LIUD myometrium, LIUD fundus ($p=0.182$; $p=0.703$; $p=0.816$) for two groups.

CONCLUSIONS: Our results demonstrate that complaints of bleeding and pain do not associate with the position of the LIUD in the uterine cavity as calculate by the 2D TvUSG. The ultrasonographic diagnosis of the LIUD position IUD measurement of endometrium and myometrium distances were equally useful in cases. However, myometrium LIUD distance is better choice because of the myometrium and endometrium imaging much easier to analyze 2D TvUSG than the endometrial distance. Further researches are needed the 'normal' limits for LIUD considered for endometrium and myometrium distance.

Keywords: Levonorgestrel IUD, position, Transvaginal ultrasonography (TvUSG)

Figure 1

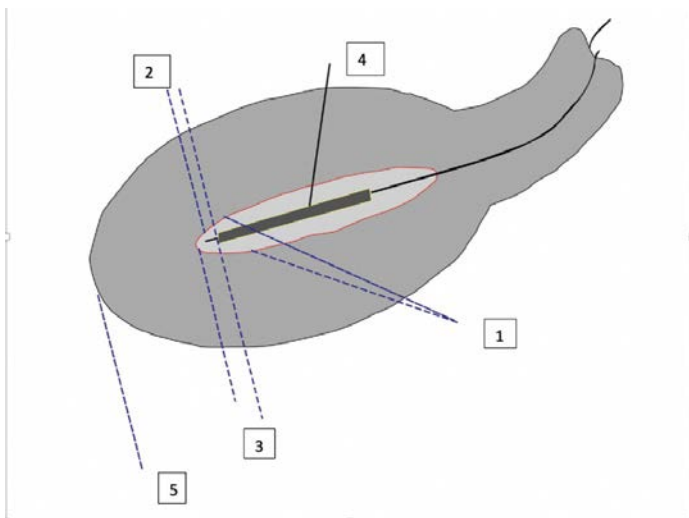


Figure1: Description of the TvUSG distances (1: endometrial thickness; 2: LIUD endometrium, 3: LIUD myometrium, 4: Vertical arm of LIUD, 5: uterine fundus)

SS-117 [Obstetri Genel]

Efficacy of different iron replacements in pregnant women

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OBJECTIVES: The aim of our study is to compare the effectiveness of iron replacements used in pregnancy and to determine the most effective elementer iron dose.

MATERIAL-METHODS: It was a retrospective cohort study among pregnant women of gestational age between 20 to 28 week. A total of 1077 pregnant women in the low risk group who did not use any iron replacement or multivitamin support since the beginning of pregnancy were questioned. Those who did not use the treatment regularly or who had an additional disease in the process were excluded from the study. 105 pregnant women who met the criteria, using +2 valence (Fe+2) 100 mg /day elemental iron, Fe+2 80 mg / day elemental iron and +3 valence (Fe+3) 100 mg / day elemental iron were examined in 3 groups. Hemoglobin levels before iron supplementation, the content of the supplement they used, and control hemoglobin values at the 4th week were recorded.

RESULTS: At the end of 4 weeks, it was observed that hemoglobin levels increased significantly in the groups using Fe+2 ($p < 0.001$). There was no significant change in the group using Fe+3 ($p = 0.887$). The amount of increase in Fe+2 is significantly different from Fe+3 (0.697) and no difference between Fe+2 groups. A decrease of 0.4% was observed in hemoglobin levels in those using Fe+3, a 5% increase was observed in those using Fe+2 80mg/day and 6% in those using Fe+2 100 mg/day.

CONCLUSION: Iron deficiency and iron deficiency anemia is the most common type of anemia during pregnancy. It's important because of adverse pregnancy outcomes such as low birth weight babies, pre-term deliveries and increased maternal morbidity and mortalities. In Turkey Iron Supplementation Program in Pregnant Women includes iron supplementation from the beginning of the 4th month of pregnancy (second trimester) for a total of nine months, six months during pregnancy and three months after delivery, using an appropriate iron preparation containing elemental iron for all pregnant woman except for cases where iron is not applicable. It is aimed to replace 40-60 mg of elemental iron daily and to provide free distribution to those without health insurance. Different iron replacements are preferred in primary, secondary and tertiary healthcare institutions. Fe+3 is distributed free of charge to pregnant women in our country. Although Fe+2 100 mg/day was the most effective in our study, a larger and prospective study may be required to obtain more precise data.

Keywords: iron, supplementation, pregnancy

SS-118 [Obstetri Genel]

Examination of nutritional status with postpartum depression

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AIM: This study was conducted to determine the relationship between depression and nutritional status in the postpartum period. **MATERIALS-METHOD:** This study consisted of two groups: Group 1: Women who had postpartum depression risk according to Edinburgh Postpartum Depression Scale scores (n: 40). Group 2: Women who had not (n:80). The data were collected by the researcher using a questionnaire prepared by face-to-face interview method. Edinburgh Postpartum Depression Scale was used to determine the risk of depression in postpartum women. The scale consisted of 10 questions and the answers were evaluated in a 4-point Likert format and scored 0-3. Score above twelve points were accepted as the risk group. Food consumption of mothers were determined by 24-hour reminder method. The daily consumed energy and nutrients were calculated using the Nutrition Information Systems Program. Body Mass Index ((kg/m²) was calculated with the formula of body weight (kg)/height (m²), the results were evaluated according to the BMI classification of the World Health Organization. History of chronic disease, using antidepressant medication, labor before 37 weeks of gestation and whose baby was referred to neonatal intensive care service were excluded. **RESULTS:** According to the Edinburgh Postpartum Depression Scale, the mean score of the group 1 was 15.2±3.19, group 2 was 6.1±3.92. The depression score was found to be higher in mothers who had a breastfeeding frequency of more than 180 minutes and had a large family and did not work (p<0.05). It was determined that mothers at risk of depression consumed less vitamin B12 on average (p=0.032), however, no statistically significant difference was found between consuming energy and other nutrients and the risk of depression (p>0.05). **CONCLUSION:** Nutritional treatment of postpartum depression can be provided with adequate and balanced nutrition. The stress and anxiety experienced by the woman prevents her from successfully breastfeeding, adequate and balanced diet. Balanced intake of macro and micronutrients reduce the risk of postpartum depression.

Keywords: postpartum depression, balanced diet, stress and anxiety

SS-119 [Obstetri Genel]

Feared complication in medical abortion; uterine rupture, 10 years of tertiary center experience

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AIM: Misoprostol is one of the medical agents used for medical abortion in intrauterine ex-fetus cases. Although rare, uterine rupture can be seen after misoprostol administration. Even when dosed according to FIGO recommendations, the risk of rupture is relatively increased, especially in patients with a history of cesarean delivery (C/S). Due to its rarity, real-life data on misoprostol-associated uterine rupture are crucial. This study aimed to evaluate the demographic and clinical characteristics of patients who had a uterine rupture during medical abortion with misoprostol after intrauterine ex-fetus diagnosis in our tertiary center in the last ten years (2012-2022).

METHOD: The data of patients who received misoprostol for intrauterine ex-fetus in the Early Pregnancy Service of Etlik Zübeyde Hanım Gynecology Training and Research Hospital in the last ten years (2012-2022) were reviewed retrospectively. Age, obstetric history, surgical and medical history, rupture site and type, treatment method of patients with uterine rupture were recorded by scanning the patient files and hospital information system. The data were analyzed by descriptive statistical methods.

RESULTS: In our tertiary center, the number of patients who underwent medical abortion with misoprostol in the last ten years (2012-2022) was 4950. Uterine rupture was detected in 8 of the patients (1.6/1000). The median age of the patients with uterine rupture was 33 (28-40). The median number of gravida was 4 (2-6), the number of parity was 2 (1-4). One woman had a history of abortion. Only one patient had a history of D&C. Seven of the patients (87.5%) had a history of C/S delivery. The median number of C/S was 2 (0-3). There was no pregnant woman with a history of non-C/S surgery. The uterine rupture occurred in the old C/S incision line in 4 (50%) of patients. Complete rupture developed in one patient and partial rupture in the remainder. While total hysterectomy was performed in one patient, primary repair was performed in the other seven patients. The mean preoperative hemoglobin was 9.9±2.3. Erythrocyte replacement was performed in four patients during surgery and in two patients postoperatively. No surgical complications or maternal death occurred.

CONCLUSION: The history of C/S in seven of the patients in our study suggested that the risk of uterine rupture might increase in those who received misoprostol. It was also noteworthy that half of the patients had uterine rupture from the cesarean scar site. There is a need for a detailed evaluation of the relationship between misoprostol and uterine rupture with multicenter studies with large patient participation.

Keywords: Uterine rupture, misoprostol, abortion

Table 1. Clinical, obstetric and rupture characteristics of the patients

Patient number	Age	G	P	H	A	D&C	NSD	C/S	Rupture site	Rupture type	Surgery type	Preop Hg	ET
1	34	4	3	3	0	0	0	3	Incision	C	Primary repair	12.4	0
2	37	5	4	4	0	0	4	0	Fundus	C	Primary repair	6.5	Po/2
3	34	3	2	2	0	0	0	2	Right isthmus	C	Primary repair	10.3	S/2
4	28	3	2	2	0	0	0	2	Low segment below incision	P	Primary repair	10.9	S/2 Po/1
5	32	6	3	3	0	2	0	3	Incision	C	Hysterectomy	9.9	S/5
6	32	4	2	2	1	0	0	2	Incision	C	Primary repair	10.8	0
7	40	4	3	2	0	0	2	1	Incision	C	Primary repair	12.2	0
8	31	2	1	1	0	0	0	1	Corpus anterior	C	Primary repair	6.2	S/6

G:gravida, P: parity, H: healthy, A:abortion, D&C:dilation and curettage, NSD:normal spontaneous delivery, C/S: cesarean section, C:complete, P:partial, S:Surgery, Po:postoperative, ET: erythrocyte transfusion

SS-120 [Obstetri Genel]

Comparison of the effects of sugammadex and neostigmine on postoperative bowel functions in cesarean section patients

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OBJECTIVE: Paralytic ileus, a temporary inhibition of bowel motility, is believed to follow all abdominal surgery. It has been suggested that stimulation of pain fibers, excessive sympathetic tone, and the release of inhibitory neurotransmitters from bowel wall associated with bowel manipulation and peritoneal irritation are responsible mechanisms. At the end of the cesarean section, there are several agents for reversal of general anesthetic drug's effect. One of them is Neostigmine, which is a reversible inhibitor of acetylcholinesterase and when administered IV, it stimulates gastrointestinal motility by increasing parasympathetic activity. On the other hand, recently a newly introduced, sugammadex, has routinely being used for reversal of nondepolarizing neuromuscular blocking agents (rocuronium and vecuronium) in C/S patients. Sugammadex shows its effect by encapsulation of vecuronium and rocuronium. Compared to other acetylcholinesterase inhibitors (neostigmine etc.), sugammadex has better recovery and less residual blocking effect. Our purpose was to compare, for the first time in the literature, effect of sugammadex and neostigmin in elective CS patients in terms of bowel functions.

METHODS: 76 patients enrolled for this observational prospective controlled study. Patients were divided into two groups. Sugammadex (Group I n= 39) and Neostigmine (Group II n= 37). Assignment of patients into groups were done by two anesthesiologists preoperatively according to American Society of Anesthesiologist (ASA) guideline. All C/S operations were performed by same physician (E.D). A standard transabdominal and uterine incision was used during cesarean section. After the operation, in the postoperative obstetric unit, patients were encouraged to walk 5 min at the 6th postoperative hour and 10 min at the 12th hour. On postoperative days 1 and 2 they were asked to walk at least 5 times for at least 15 min. They were then interviewed and examined postoperatively at about 4, 8, 12, 24 and 48 h by the patients' assistant, and bowel movement, the time of first flatus, time passed until defecation, length of hospital stay were recorded. If passage of flatus had not occurred by 48 h postoperatively, intestinal enema was applied. Removal of bladder catheters was performed at the 6th hour postoperatively.

RESULTS: First time to Passage of flatus mean values did not show any significant difference between the groups (p=0,960). While the mean value was 18.4 hour(h) in the Sugammadex group, it was 18.5h in the Neostigmine group. Mean values of defecation time do not differ according to groups (p=0234). Mean value of time passed until first defecation was 27.9h in the Sugammadex group, which it was 30.4h in the Neostigmine group.

CONCLUSION: Sugammadex in cesarean section patients has a similar effect on bowel functions compared to neostigmin which is already an acetylcholinesterase inhibitor, which acts by enhancing smooth muscle contractions and colonic motor activity, resulting in an increase in intestinal tone and peristalsis.

Keywords: bowel function, cesarean, cesarean section, neostigmine, sugammadex

Table 1

	Sugammadex(n=39)	Neostigmin(n=37)	Total(n=76)	p
Age	27,9 ± 5,3	29,4 ± 5,2	28,6 ± 5,3	0,217*
Height (cm)	163,6 ± 4,1	163,2 ± 6,1	163,4 ± 5,1	0,757
Weight (kg)	77,5 ± 6,8	73,6 ± 10,5	75,6 ± 8,9	0,062
BMI	28,9 ± 2,5	27,6 ± 3,5	28,3 ± 3,1	0,056
Gravity	3 (1 - 6)	2 (1 - 5)	2 (1 - 6)	0,199**
Parity	2 (0 - 5)	1 (0 - 4)	1 (0 - 5)	0,251**
Number of previous C/S	2 (1 - 4)	2 (1 - 3)	2 (1 - 4)	0,836**
The first passage of flatus (hours)	18,4 ± 9,1	18,5 ± 8,2	18,4 ± 8,7	0,960*
The first defecation(hours)	27,9 ± 9,2	30,4 ± 9,1	29,1 ± 9,2	0,234*
Hospital stay time(days)	2	2	2	NS

Comparison of demographic and postoperative data of the groups.

*Independent t test (mean ± s.deviation), **Mann Whitney U test

(median (min-max) †BMI: Body Mass Index, C/S: Cesarean Section # Not Significant

SS-121 [Obstetri Genel]

Examination of Cesarean Section Deliveries in Adolescent Pregnancies in a Tertiary Center

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OBJECTIVE: To evaluate cesarean deliveries in adolescent pregnancies at high risk due to maternal and fetal morbidity and mortality using the Robson ten-group classification system.

METHODS: All adolescent pregnant women who gave birth in Kayseri City Hospital between 2016-2020 were screened and separated according to years. In the study, hospital data were evaluated retrospectively and records were examined. Adolescent pregnancies separately for each year were classified according to the Robson ten-group classification system.

RESULTS: It was determined that 5325 adolescent pregnant deliveries. Of these, 949 were by cesarean section and the rate was 17.8%. The mean age at marriage was found to be 17.2 and gestational age as 17.7. While 20% of the pregnant women were nulliparous, 12% had 2 previous pregnancies. Consanguineous marriages were also detected at a high rate (47%), and 24% of the pregnant women were illiterate and 65% had a low socioeconomic status. From pregnancy complications; Preeclampsia was 12%, eclampsia was 1%, Gestational diabetes was 2%, Premature membrane rupture was 23%, Preterm labor was 27%. Maternal mortality occurred in 1 pregnant woman. While anemia was present in 42% of the pregnant women, neonatal mortality was 14% and the frequency of congenital anomalies was 14%. The highest cesarean indication was 26.4% due to fetal distress, followed by patients with previous cesarean section. Due to presentation anomalies, 157 cesarean sections (16.5%) were performed and CPD cesarean rates were found to

be 10.2%. 6.3% of cesarean indications were due to multiple pregnancy and 5.1% of them were due to large baby. When examined according to the Robson classification system, the patient population was mostly in Group 1 (40.8%), and the contribution of the group to the cesarean section rates was highest in this group. 23.4% of the pregnant women are in Group 2 and 20.6% are in Group 3. In terms of contribution to cesarean section rates, Group 5 makes the second largest contribution (4.3%).

CONCLUSION: In our study, we compared cesarean section rates in adolescent pregnancies. In order to reduce the cesarean section rates, it is necessary to pay special attention to Groups 1-2 and 3, which make up the majority of the population. In addition, the rate of having a repeat cesarean section was found to be very high in those who had a previous cesarean section. Supporting them to overcome their fear of childbirth by expanding pregnant schools will decrease the rates of cesarean section. Insisting on normal delivery after cesarean section in suitable patients will also help to reduce cesarean rates. The fact that physicians prefer cesarean births in order not to take risks because they practice their profession with this fear increases the number of cesarean births. It would be beneficial to examine the act of birth not only as a medical act but also within the social, legal and administrative system. Success in reducing adolescent pregnancy rates depends on young people knowing where to find information and services related to sexuality and contraception and being able to access it easily.

Keywords: adolescent pregnancy, cesarean section, Robson ten-group classification system

SS-122 [Obstetri Genel]

Investigation of intraoperative nausea and vomiting during cesarean section under combined spinal-epidural anesthesia

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OBJECTIVE: This study's aim was to investigate the effects of surgical and non-surgical factors on intraoperative nausea and vomiting during cesarean sections performed under CSE (combined spinal-epidural) anesthesia.

MATERIAL-METHODS: 112 patients who were delivered by cesarean section under CSE anesthesia in Memorial Şişli Hospital were included in this retrospective study. Intraoperative nausea, intraoperative vomiting, intraoperative hypotension, age, body mass index, duration of operation, intraoperative methylergonovine maleate use, whether the uterus is repaired inside or outside the abdomen, closure of parietal peritoneum, having a previous cesarean section and fetal gender information were obtained from digital records and hard copy files and recorded as data. Exclusion criteria for the study were; history of systemic disease (diabetes, hypertension, thyroid disease), smoking, pregnancy-induced hypertension, preeclampsia, gestational diabetes, anemia, obesity (body mass index >30) and gastrointestinal disease. The relationships between intraoperative nausea and vomiting and other variables were investigated. As a result of the Power analysis using the G*Power program, when 30% was taken for the incidence of nausea,

the minimum sample size was determined as 100 patients (Power:0.80 and α :0.05).

RESULTS: Intraoperative nausea and vomiting were detected in 30.4% and 3.6% of the patients, respectively. No statistically significant correlation was found between age, body mass index, duration of operation, repairing the uterus in situ or exteriorized, parietal peritoneum closure, fetal gender, having a previous cesarean section, and intraoperative nausea/vomiting (respectively $p=0.781, 0.623, 0.297, 1.0, 1.0, 0.741, 0.423$). Nausea/vomiting was observed in 41.5% of the cases that were administered methylergonovine maleate and in 23.9% of the cases that were not administered, and although the difference between them was close to significance, it was not statistically significant ($p=0.084$). Likewise, nausea/vomiting was observed in 53.8% of cases with hypotension and 27.3% of cases without hypotension, however the difference did not reach statistical significance ($p=0.061$).

CONCLUSION: This study's findings suggest that the development of intraoperative nausea/vomiting during cesarean sections performed under CSE anesthesia, although not reaching a statistical significance, seems to be associated with the perioperative methylergonovine maleate use and hypotension considering that the p values were close to statistical significance.

Keywords: cesarean, combined, epidural, nausea, spinal, vomiting

SS-123 [Obstetri Genel]

Does the COVID-19 pandemic have an impact on routine antenatal care attendance and neonatal outcomes of pregnant women?

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Objective: The aim of the study was to investigate the effect of the Coronavirus disease 2019 (COVID-19) pandemic on antenatal care attendance and to evaluate the pregnancy and neonatal outcomes of these patients that delivered during this period.

Material and Methods: All women who delivered at a tertiary hospital in Ankara, Turkey during the pandemic period (September 2020 and January 2021) and during the same period one year before the pandemic (September 2019 and January 2020) were included in the study. Age, gravida and parity, number of presentations to antenatal care unit, gestational complications, and pregnancy outcomes of the patients in the study and control groups were recorded and compared. The women who had COVID-19 during the study period were excluded.

Results: The study enrolled 532 patients presenting to the hospital during the pandemic period and 650 during the control period. Patients who gave birth during the pandemic were younger than those presenting to the hospital before the pandemic [26.56 ± 6.36 vs 27.79 ± 5.85 ($p=0.001$)]. The Cesarean section rate was significantly higher during the pandemic, but the pregnancy and neonatal outcomes were similar for the two evaluation times. The number of pregnant women with less than four [205 (39.4%) vs 256 (38.5%)] and more than 10 [103 (23.8%) vs 156

(19.4%)] antenatal visits was higher during the pandemic period, but the difference did not reach statistical significance ($p=0.087$). Antenatal screening tests were performed more frequently during the pandemic period.

Conclusion: Although the pandemic has reduced the number of prenatal visits, this was not significant compared to the pre-pandemic period. In addition, it was determined that more antenatal screening tests were performed and cesarean deliveries were more common during the pandemic period.

Keywords: COVID-19 Pandemic, Pregnancy, Antenatal Care

SS-124 [Obstetri Genel]

Remdesivir treatment in pregnant women infected with SARS-CoV-2

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AIM: The Coronavirus-2 (SARS-CoV-2) pandemic associated with Severe Acute Respiratory Syndrome has led to controversy regarding the use of pharmacological interventions during pregnancy and postpartum period. Remdesivir is the drug used in the treatment of this period. Remdesivir inhibits RNA-dependent RNA-polymerase, inhibiting viral replication. Remdesivir is the first drug licensed to treat SARS-CoV-2 based on data showing that it reduces recovery time in hospitalized patients. In this study, we aimed to observe the effects of Remdesivir use on pregnant women infected with SARS-CoV-2.

METHOD: 32 patients aged between 25-42 who were hospitalized in the Covid-19 service of Kanuni Training and Research Hospital were included in the study. In the treatment of 16 patients, lopinavir (200 mg) / ritonavir (50 mg) 2x2 tablets PO and hydroxychloroquine 2x400 mg oral tablets were administered with 2x200mg PO for 4 days after loading, and the other 16 patients were administered 200mg on the first day and then 100mg IV Remdesivir daily for the next four days. Parameters such as D-Dimer, Ferritin, CRP, sO₂, BMI, complete blood count of the patients, observation of side effects and discharge times from the hospital were analyzed comparatively.

RESULTS: We found significantly better discharge times in the treatment group with Remdesivir. Although the need for intensive care was not significant, it was found to be decreased in the Remdesivir group.

CONCLUSION: Remdesivir seems to be an effective agent in the treatment of pregnant women infected with SARS-CoV-2. However, further studies are needed on its teratogenic effect and long-term results.

Keywords: Covid-19, pregnancy, remdesivir, SARS-CoV-2

SS-125 [Obstetri Genel]

Fetal tachycardia may indicate asymptomatic COVID-19 in term pregnancies: A case series

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INTRODUCTION: Coronavirus Disease 2019 (COVID-19) is a novel pandemic of viral origin. It has been shown that the rate of fetal distress increases in pregnancies with the diagnosis of COVID-19. In this case series, we aimed to present fetal tachycardia in term pregnancies with asymptomatic COVID-19.

CASES: In this study, we aimed to present 7 pregnant women at term who applied for the pregnancy follow-up and were hospitalized in our clinic with the diagnosis of fetal tachycardia. None of the pregnant women had symptoms of COVID-19. They had no history of any chronic disease or close contact with a COVID-19 case. Complete blood count and other laboratory analyzes were normal. In the follow-up, all the cases need emergency C-section with the diagnosis of fetal distress. It was observed that the preoperative COVID-PCR tests were positive for all of them. The cases were diagnosed with asymptomatic COVID-19, and one of the newborns was also found to be positive for COVID-19 (Table 1).

CONCLUSION: COVID-19 should be considered in fetal tachycardia cases, even in the absence of disease symptoms. Fetal distress is an obstetric emergency. Therefore, the potential threats of COVID-19 should be kept in mind to be able to cope with possible adverse maternal and neonatal outcomes. The isolation of the mother with COVID-19 infection, or the need for the neonatal intensive care unit may impair the contact between the mother and neonate, including the interrupted breastfeeding. In this regard, it is important for the delivery team to direct their attention to the situation of asymptomatic COVID-19 infection which may accompany fetal tachycardia.

Keywords: COVID-19, fetal distress, fetal heart rate, nonreassuring fetal status, pregnancy outcomes.

Table 1

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7
Gestational weeks	39 +4	39	37	38 +1	38 +3	40	38 +6
Complaint for hospital apply	Routine pregnancy control visit	Labor pain	Labor pain	Labor pain	Labor pain	Routine pregnancy control visit	Labor pain
COVID-19 symptoms +/-	-	-	-	-	-	-	-
Fetal heart rate on EFM							
baseline	160	180	170	165	175	160	170
characteristics	Loss of variability	Persistent late decelerations	Loss of variability	Loss of variability	Persistent late decelerations	Loss of variability	Loss of variability
Maternal SARS-CoV-2 RT-PCR	Positive	Positive	Positive	Positive	Positive	Positive	Positive
Delivery route	Emergency C-section (fetal distress)	Emergency C-section (fetal distress)	Emergency C-section (fetal distress)	Emergency C-section (fetal distress)	Emergency C-section (fetal distress)	Emergency C-section (fetal distress)	Emergency C-section (fetal distress)
Birthweight grams	3415	3140	3050	2850	2790	3350	3290
APGAR scores 1st - 5th minute	7-9	6-8	5-6	6-8	5-6	8-10	7-9
Neonatal SARS-CoV-2 RT-PCR	Negative	Negative	Positive	Negative	Negative	Negative	Negative
Need for NICU	-	-	NICU admission for respiratory problems. Discharged at postpartum 5th day.	-	NICU admission for respiratory problems. Discharged at postpartum 2nd day.	-	-

Clinical characteristics and pregnancy outcomes of the cases.

SS-126 [Jinekoloji Genel]

Comparison of the Effectiveness of Intrauterine Lidocaine Injection, Lidocaine Spray, and Rectal Indomethacin on Pain Control during Pipelle Endometrial Sampling

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OBJECTIVE: Although endometrial sampling is one of the most frequently used procedures in the gynecology clinic, it may cause pain. The aim of this study was to compare the effectiveness of intrauterine lidocaine spray, lidocaine injection and rectal indomethacin on pain control during endometrial sampling.

MATERIALS-METHODS: This prospective study of 299 patients was performed at the Namık Kemal University Medical Faculty between November 2018 and April 2019. Patients were divided into three groups according to the pain control procedure used. VAS scoring was performed at the time of sampling and at 1, 5 and 10 minutes after the procedure. Pulse and blood pressure measurements were recorded before and after the procedure.

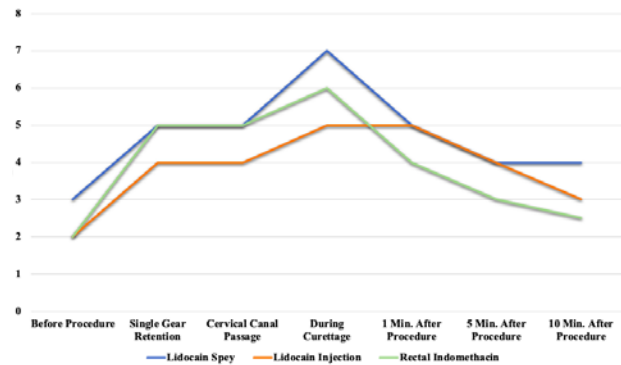
RESULTS: There was no significant difference between the three groups with regard to age, BMI and gravida numbers. VAS scores during

cervical canal passage and curettage at the time of single gear retention were significantly lower in the lidocaine injection group. VAS scores at 1, 5 and 10 minutes after the procedure were significantly lower in the rectal indomethacin group.

CONCLUSION: The results of this study suggest that pain control is best achieved by intrauterine lidocaine injection during sampling, and by rectal indomethacin after the procedure.

Keywords: Endometrial biopsy, indomethacin, lidocaine spray, pain relief, visual analog scale

Comparison of the VAS scores by groups



SS-127 [Jinekoloji Genel]

The level of using family planning methods of refugees in Turkey and the factors affecting their choices: A Retrospective Clinical Study

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OBJECTIVE: Family planning (FP), which is considered within the scope of primary health care services, is defined as giving individuals responsible freedom regarding information, education, and tools so that they can have as many children as they want. The purpose of FP is to prevent unwanted pregnancies, as well as to protect the health of mothers and children and thus prevent maternal and child deaths. In this study, we aimed to determine the family planning methods used by refugee women of reproductive age who presented to Meram State Hospital family planning outpatient clinic and the factors affecting their choices.

METHODS: Parameters such as women age, duration of marriage, number of gravidity and birth, socioeconomic status, educational level, and the contraceptive methods preferred by foreign national women who presented to family planning (FP) outpatient clinic between January 1st, 2013, and October 31st, 2020, were documented and assessed.

RESULTS: Accordingly, while the cumulative percentage of Syrian women who applied to the FP clinic was 1.7% in 2013, this rate was

91.1% in 2019. Syrian women made up 93.6% of the foreign nationals included in the study. Syrian women were followed by Afghan women with 2.5% and Iraqi women with 1.9%. The sociodemographic characteristics of the foreign national women who presented to the family planning outpatient clinic are given in Table 1. According to the table, 87.3% of the women were in the 20-39 years age range, 60.4% were primary school graduates, and 54.7% had a low economic level. When evaluated in terms of fertility characteristics, the mean age of the women was 29.93 ± 6.52 years, the mean length of wedding was 10.49 ± 6.03 years, and the mean number of live children was 4.07 ± 1.90 (Table 2). Considering the distribution of the contraceptive methods used in general, it was seen that the most preferred was an intrauterine device (IUD) (51.1%) and bilateral tubal ligation (BTL) (33.2%) (Table 3). The education level of the women participating in the study did not seem to affect the method used ($p=0.008$). IUDs and BTL were the most commonly used methods in women with low or no education and women with high education level (Table 4). However, increased income levels caused BTL to be preferred more. Women with low-income preferred the IUDs the most (54.1%), whereas women with high-income mostly preferred BTL (56.9%) (Table 5). IUDs and BTL were the most common birth control methods used by women from countries outside of Syria (Table 6).

CONCLUSION: Effective and appropriate contraceptive methods should be explained to immigrant women because the education and income levels of refugees affect the choice of contraception.

Keywords: family planning method, refugee, reproductive period

Table 1. The distribution of refugees according to the sociodemographic features.

Features	Number (n=720)	%
Education level		
Illiterate	184	25.6
Primary education	435	60.4
High school	74	10.3
University	27	3.8
Social security status		
Social security status		
Available	705	97.9
Non-available	15	2.1
Marital status		
Married	720	100.0
Single	-	0
Economic status		
Lower level	397	54.7
Intermediate level	275	38.2
High level	51	7.1
Delivery type		
Vaginal delivery	359	49.8
Cesarean section	51	7.1
Repeat cesarean section	310	43.1

Table 2. The fertility data of the women.

Variables	Minimum/ Maximum	Mean \pm Standard deviation
Age (years)	17-49 17-49	29.93 ± 6.52
Duration of marriage	0-31	10.49 ± 6.03
Number of pregnancies	0-11	4.57 ± 2.32
Parity number	0-8	4.13 ± 1.57
Number of miscarriages	0-7	0.45 ± 1.04
Number of living children	0-7	4.07 ± 1.90

Table 3. The distribution of family planning methods among foreign national women who applied to family planning clinic.

Family planning methods	Number (n=720)	%
CI	3	0.4
IUD	368	51.1
OC	77	10.7
BTL	239	33.2
SI	0	0
Condom	33	4.6
Depot progesterone	0	0

CI: coitus interruptus; IUD: intrauterine device; OC: oral contraceptive; BTL: bilateral tubal ligation; SI: subcutaneous implant

Table 4. The distribution of the birth control methods preferred by the women with respect to education level.

Education level (n=721)	BTL (n=239)	CI (n=3)	Condom (n=33)	OCs (n=77)	IUD (n=369)	p
Illiterate (n=184)	50 (27.2)	1 (0.5)	4 (2.2)	25 (13.6)	104 (56.5)	
Primary school (n=436) (%)	142 (32.6)	2 (0.5)	25 (5.7)	47 (10.8)	220 (50.4)	<0.008*
High school (n=74) (%)	40 (54.0)	0 (0)	3 (4.1)	4 (5.4)	27 (36.5)	
University (n=27) (%)	20 (74.1)	0 (0)	1 (3.7)	1 (3.7)	5 (18.5)	

CI: coitus interruptus; IUD: intrauterine device; OC: oral contraceptive; BTL: bilateral tubal ligation. Chi-SquareTests (p)

Table 5. The distribution of birth control methods preferred by the women with respect to their socioeconomic status.

Economic status (n=721)	BTL (n=239)	CI (n=3)	Condom (n=33)	OCs (n=77)	IUD (n=369)	p
Lower level (n=395) (%)	104 (26.4)	2 (0.5)	21 (5.3)	54 (13.7)	214 (54.1)	
Intermediate level (n=275) (%)	111 (40.4)	1 (0.4)	8 (2.8)	20 (7.3)	135 (49.1)	0.001*
High level (n=51) (%)	29 (56.9)	0 (0)	4 (7.8)	3 (5.9)	15 (29.4)	

CI: coitus interruptus; IUD: intrauterine device; OC: oral contraceptive; BTL: bilateral tubal ligation. Chi-SquareTests (p)

Table 6. International distribution of family planning methods.

Nationally	CI	IUD	OC	Condom	BTL	p
Syria (n=674) %	3 (0.4)	342 (50.7)	77 (11.4)	31 (4.6)	221 (32.0)	
Afghanistan (n=18) %	-	10 (55.6)	-	-	8 (44.4)	
Morocco (n=3) %	-	2 (66.7)	-	-	1 (33.3)	
Georgia (n=2) %	-	1 (50.0)	-	-	1 (50.0)	
Iraq (n=14) %	-	7 (50.0)	-	1 (7.1)	6 (42.9)	>0.05
Iranian (n=3) %	-	3 (100.0)	-	-	-	
Kyrgyzstan (n=2) %	-	1 (50.0)	-	-	1 (50.0)	
Sudan (n=2) %	-	1 (50.0)	1 (50.0)	-	-	
Togo (n=2) %	-	1 (50.0)	-	-	1 (50.0)	

CI: coitus interruptus; IUD: intrauterine device; OC: oral contraceptive; BTL: bilateral tubal ligation

SS-129 [Jinekoloji Genel]

Ultrasonographic uterine evaluation and intrauterine device displacement

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OBJECTIVE: Intrauterine devices (IUDs) are the most commonly used method of long-acting reversible contraception. IUD malpositions are described as expulsion, embedding, displacement, and perforation, which may cause contraception failure, organ injury, hemorrhage, and infection. The aim of the study was to evaluate the relationship between displacement and IUD positioning in the uterus, and uterine dimensions as measured using transvaginal ultrasonography.

MATERIAL-METHOD: Three hundred eighty-four patients who had TCu380A devices inserted at a tertiary hospital were evaluated at insertion and at one month, three months, and six months after insertion. At the insertion visit, demographic characteristics, history of menorrhagia, dysmenorrhea, previous IUD displacement, and obstetric history were recorded. Transvaginal ultrasonographic measurement of the uterine cavity, uterine length, uterine width, cervix length, cervix width, transverse diameter of the uterine cavity, the distance between the tip of the IUD and the fundus and endometrium were measured to evaluate IUD displacement.

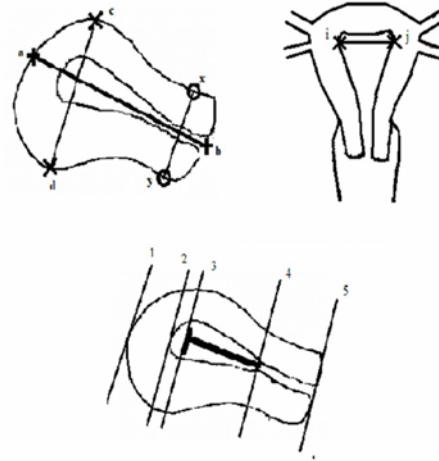
RESULTS: Sixteen of 384 patients had displacement. There were

significant differences in times between last pregnancy outcomes and IUD insertion and dysmenorrhea history ($p=0.004$ and $p=0.028$, respectively). Among TCu380A users, women with 7.5 mm IUD endometrium distances had a higher risk for displacement with a sensitivity of 81% and specificity of 37.5% (AUC: 0.607, 95% CI: 0.51-0.70). Women with uterus width less than 41.5 mm were more likely to have displacement with a sensitivity of 53.8% and a specificity of 75% (AUC: 0.673, 95% CI: 0.60-0.75).

CONCLUSION: IUD endometrium distance and uterus width are important parameters for displacement for TCu380A.

Keywords: copper IUD, displacement, expulsion, uterine dimensions, ultrasonography

Fig 1 A schematic illustration of ultrasonographic uterine measurements.



Distance between at sagittal section a-b: Total axial uterine length (UL), c-d: Uterine width (UW), x-y: Cervix width (CW), 1-3: IUD-fundus, 2-3: IUD-endometrium, 2-4: Length of uterine cavity (LUC), 4-5: Cervix length (CL) and distance between i-j: the length of the largest transverse diameter of the coronal section of the uterine cavity (LTD).

Fig 2. ROC curve demonstrating sensitivity and specificity for IUD-endometrium distance and uterine width

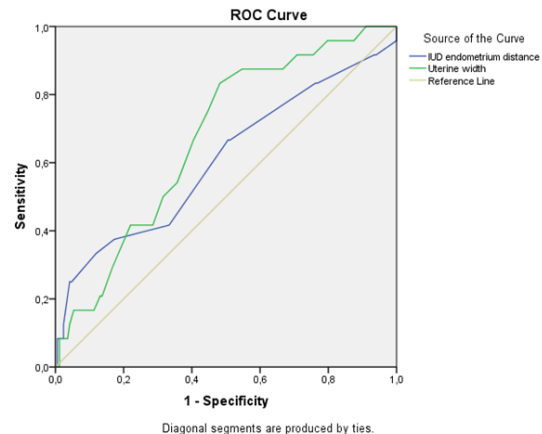


Table 1. Demographic characteristics of case and control groups

		IUD Displacement		p value
		Control group	Case group	
Age		32.3 ± 7.8	30.3 ± 9.0	0.784
Gravida		3(1-8)	2(1-5)	0.102
Parity		2(1-8)	2(1-5)	
Route of delivery	Vaginal	264 (71.7%)	8 (50.0%)	0.171
	CS	80 (21.7%)	6 (37.5%)	
	Vaginal+CS	24 (6.5%)	2 (12.5%)	
Time between last pregnancy outcome and insertion of IUD	Postpartum	26 (7.1%)	0	0.004*
	<6 Months	92 (25.0%)	6 (37.5%)	
	6-12 Months	42 (11.4%)	6 (37.5%)	
	>12 Months	208 (56.5%)	4 (25.0%)	
Menorrhagia history	yes	76 (20.7%)	4 (25.0%)	0.752
	no	292(79.3%)	12 (75.0%)	
Dysmenorrhea history	yes	86(23.4%)	0	0.028*
	no	282(76.6%)	16(100%)	
Previous IUD displacement	yes	44(12.0%)	4(25.0%)	0.126
	no	324 (88.0%)	12(75.0%)	
Uterine position1	Anteversion	304(82.6%)	16(100%)	0.085
	Retroversion	64(17.4%)	0	
Uterine position2	Anteflexion	338(91.8%)	16(100%)	0.625
	Retroflexion	30(8.2%)	0	

*statistically significant ($p < 0.05$); Values are expressed as means \pm SD, n (%), or median (min-max) * Student's t-test, Pearson's Chi-square test, Fisher's exact test, and the Mann-Whitney U test were used.

SS-130 [Jinekoloji Genel]

New technic of hydrodissection-assisted transvaginal drainage of vaginal cuff abscess

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BACKGROUND: Abdominopelvic abscess is a serious, but infrequent, postoperative complication of gynecological operations (1). Drainage is essential for source control of the infection in a pelvic abscess. The complications and morbidity in this case are very low and the mortality less than 1%. (2). The purpose of our study was to report 5 cases of hydrodissection-assisted transvaginal drainage of cuff abscess with MRI-cannula.

OBJECTIVES: This new technique was performed in 5 patient: who underwent gynecological surgery, between 4 March 2020 and January 2022 in the Van Training and Research Hospital, one of patients was operated in an external center. All of these patients had at least total abdominal hysterectomy. Two patients were operated for gynecological tumors, the others for benign gynecological reasons. Open surgery was not required in 4 of the patients who underwent the procedure, and one was operated again due to abscess in the ileocecal valve and appendectomy was added to the abscess drainage due to inflammation. After complete tumor resection in this patients an abdominal CT showed a mass shadow (about 7.0 cm \times 5.0 cm) in the cull-de-sac region in

4 patients. The CT showed pelvic effusion and gas accumulation and the intestinal tube above the vaginal cuff was dilated, with effusion adjacent to the cecum in 1 patient.

MATERIAL-METHODS: First, we determined the satisfactory trajectory of the abscess by ultrasound guidance. The most suitable area where the abscess accumulated was punctured by hysteroscopy. The number 5 MRI cannula was inserted through the punctured area. It was held constant for pus to come. The MRI injector was attached to the end of the cannula to create negative pressure. The MRI injector has not to be moved. It can be rotated 30 degrees to the left or right at most. Approximately 10cc normal saline solution was injected for prophylactic purposes to displace the omentum and intestines from the abscess. Canulla was retracted. This procedure can be repeated several times. After drainage all symptoms disappeared. Postoperatively, they were treated with intravenous and oral antibiotic agents. After 4-7 days, the CRP values of the patients decreased to near normal levels and they were discharged with oral antibiotics. But only 1 patient who had abscess in iliocecal region needed surgery.

FINDINGS: Several methods have been described to overcome these challenges (3,4). We present 5 cases of post-surgical vaginal cuff abscesses, treated with our new technic-conservative-management using hydrodissection-assisted transvaginal drainage with MRI-cannula.

CONCLUSIONS: Our method is an effective, less challenging and safe method for treating vaginal cuff abscesses as long as the drainage modality is appropriately selected based on the etiology, size and mucus viscosity of the abscess. We hypothesized that our method is an effective alternative to surgery in patients whose abscesses are not amenable to percutaneous drainage techniques. In our cases we used hydrodissection to dissect an abscess and to protect adjacent anatomical structures. Moreover, we used MRI cannula as aspirator and created negative pressure to facilitate the procedure.

Keywords: vaginal cuff drainage, hydrodissection-assisted vaginal cuff drainage,

SS-131 [Jinekoloji Genel]

Has the Covid-19 pandemic changed our Tuboovarian Abscess (TOA) management practice? Tertiary Center Experiences

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OBJECTIVE: Tuboovarian abscess (TOA) is an inflammatory mass formed by the fallopian tube, ovary, and less frequently, adjacent pelvic organs. Initial treatment of TOA is intravenous antibiotics followed by oral antibiotics. If medical treatment fails, the next step is laparoscopic or laparotomic abscess drainage, adnexectomy or hysterectomy. Another approach may be needle aspiration with an image-guided catheter and antibiotic therapy. COVID-19 disease (SARS-CoV-2 Disease) spread rapidly from China to the whole world in December 2019, and started to be seen in our country as of March 2020. The disease had clinical manifestations resulting in mortality from asymptomatic carriage, and

all elective surgical interventions had to be postponed. Our aim in this study is to investigate the differences between clinical parameters of our TOA management in the pre-pandemic and post-pandemic period.

METHOD: The data of the patient who was hospitalized with the diagnosis of TOA in the Etlik Zübeyde Hanım Training and Research Hospital Gynecology Service between August 2018 and January 2022 were analyzed retrospectively. Patients diagnosed with Covid-19 were excluded from the study. Among the patients who met the criteria for inclusion in the study, 2 groups were formed, 100 of which were hospitalized between August 2018 and March 2020 (the date when the first case was reported in our country), and 63 of them were hospitalized between March 2020 and January 2022. Demographic and clinical data of the included patients were recorded.

RESULTS: Of the 163 patients included in the study, 100 (61.4%) were in Group 1 and 63 (38.6%) were in Group 2. There was a significant difference between the groups in terms of smoking status, preference for prevention method, and previous surgery history. (Table 2) While medical treatment was preferred more in the post-pandemic period in the treatment of TOA, it was observed that laparotomic surgery was preferred more in patients with surgical plans. It was observed that the hospital stay was shorter in the post-pandemic period.

CONCLUSION: Although there is no significant difference between many parameters in the management of TOA before and after the pandemic, the shorter hospitalization time, the greater preference for medical treatment, and the more laparotomic surgery for surgically planned patients, in accordance with the guidelines of the pandemic period. We think that it is to reduce the risk of transmission. We think that our study should be supported by more multicenter and more patient studies.

Keywords: Tubaovarian abscess (TOA), COVID-19, Laparoscopy, Laparotomy

Table 1. Demographic data of the patients

	Grup 1 August 2018 - March 2020 (n=100)	Grup 2 March 2020 January 2022 (n=63)	p
Age (years) (mean, std dv)	39,20 ±7,73	39,11 ±7,77	0,94*
BMI (kg/m2) (mean, std dv)	26,30 ±3,30	26,46 ±3,46	0,76*
Gravida (min - max)	0 - 7	1-10	0,44***
Parity (min - max)	0 - 7	1-5	0,67***
Contraceptive Method(%)			
None	51 (51)	30 (47,6)	0,05**
IUD	42 (42)	28 (44,4)	
Tubal Ligation	-	4 (6,3)	
Condom	4 (4)	-	
Other	3 (3)	1 (1,6)	
Smoking (%)			
Yes	86 (86)	45 (71,4)	0,02**
No	14 (14)	18 (28,6)	
Additional Disease (%)			
None	84 (84)	49 (77,9)	0,08**
HT	-	4 (6,3)	
DM	5 (5)	4 (6,3)	
Other	11 (11)	6 (9,5)	
History of Surgery			
No	69 (69)	30 (47,6)	0,006**
Yes	31 (31)	33 (52,4)	

*Student's t-test ** Ki Kare testi ***Mann-Whitney-U Test

Table 2. Clinical data of the patients

	Grup 1 August 2018 March 2020 (n=100)	Grup 2 March 2020 January 2022 (n=63)	p
Patient Treatment Type (%)			
Medical	39 (39)	35 (55,6)	0,03**
Surgery	61 (61)	28 (44,4)	
Operation Type(%)			
L/S SALP / SOO	53 (86,9)	16 (57,1)	0,01**
TLH	1 (1,6)	-	
L/T SALP / SOO	7 (12,5)	7 (25)	
TAH	-	5 (17,9)	
Fever (%)			
<38,3	92 (92)	57 (90,5)	0,73**
>38,3	8 (8)	6 (9,5)	
Abscess Diamater (cm) (mean, std dv)	5,95 ± 1,94	6,22 ± 2,2	0,41*
Pyosalpenx (%)			
No	57 (57)	39 (61,9)	0,53**
Yes	43 (43)	24 (38,1)	
Abscess Location(%)			
Unilateral	88 (88)	55 (87,3)	0,89**
Bilateral	12 (12)	8 (12,7)	
Duration of hospital stay (days) (mean, std dv)	13,85 ± 4,52	9,59 ± 4,63	0,00*
Antibiotics Type (%)			
Genta + Clin	80 (80)	44 (69,9)	0,03*
Seftriakson + Metronidazol	18 (18)	13 (20,6)	
Penicilin + Metronidazol	2 (2)	1 (1,6)	
Other	-	5 (7,9)	

*Student's t-test ** Ki Kare testi ***Mann-Whitney-U Test

SS-132 [Jinekoloji Genel]

Longitudinal change in serum inflammatory markers in women with tubo-ovarian abscess after successful surgical treatment: a retrospective study

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Aim: High levels of serum inflammatory markers are related to extended hospitalization and more severe disease in the case of tubo-ovarian abscess (TOA). However, there's scarce information on the serial assessment of inflammatory markers during the postoperative period of surgically treated TOA cases. This study aimed to determine the postoperative longitudinal changes in serum inflammatory markers in successful surgical treatment for TOA.

Methods: In this retrospective cohort study, patients who underwent surgery for TOA between January 2010 and March 2020 were reviewed. All inflammatory markers peaked within 48 hours after surgical intervention and then declined with time. The predicted mean returned to baseline values at different time points for each marker.

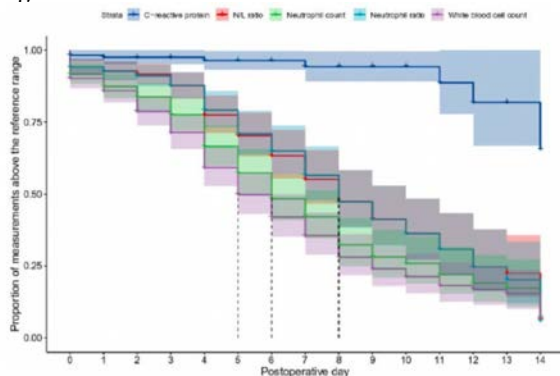
Results: The predicted mean of WBC count returned to normal range in 2.5 days (95% CI: 1.0 to 4.3 days), which was followed by NLR (mean: 7.1 days, 95% CI: 4.7 to 10.8 days) and CRP (mean: 14+ days). The difference between WBC, NLR, and CRP was significant for each comparison (P <0.05).

Conclusion: CRP is very slow to normalize after the operation and may

not be suitable for evaluating treatment success. Daily WBC and NLR measurements are highly recommended to assist in predicting the need for medical or surgical intervention.

Keywords: C-reactive protein, Pelvic inflammatory disease, Neutrophil/Lymphocyte Ratio, Surgery; Tubo-ovarian abscess, White blood cell

Fig.1



The survival plot depicting the proportion of measurements above the reference range against the postoperative days.

SS-133 [Infertile]

Evaluation Of The Potential Risks Of COVID-19 On The Reproductive-Aged Female Ovarian Function

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INTRODUCTION: Although the negative effects of Covid-19 are very common and strong around the world, the damage caused by the virus to various systems in our body is still not fully known. The reproductive system is one of the systems where our knowledge about covid-19 is very limited. Considering that the number of individuals infected with SARS-CoV-2 worldwide is quite high, it is very important to better understand the possible effects of the virus. Since it was described the presence of receptors of the virus in the ovary, studies on the reproductive involvement of coronavirus infection are warranted, particularly within recovered patients. This study was intended to investigate the relationship between COVID-19 disease and ovarian function in reproductive-aged women.

METHODS: Our prospective case-controlled study included 34 women in the reproductive period, aged between 20 and 38, who applied to Bakirköy Dr Sadi Konuk Training and Research Hospital due to Sars-CoV-2 infection between December 2020 and June 2021. It has been approved by Health Sciences University Bakirköy Dr Sadi Konuk

Training and Research Hospital Ethics Board (no:2020-478) and all women provided informed written consent. It was confirmed by PCR tests that all patients included in our study were infected with Sars-Cov-2. Parameters such as hemogram, crp, ferritin and procalcitonin were measured in order to understand the severity of the disease and inflammation in the women included in the study. The AMH values of the cases when they were infected and the AMH values of the 6th month were compared. NCSS (Number Cruncher Statistical System) 2007 (Kaysville, Utah, USA) program was used for statistical analysis

RESULTS: The mean decrease of 0.31 ± 0.80 units in the 6th month measurement compared to the 1st month AMH measurement of the subjects participating in the study was found to be statistically significant ($p=0.025$; $p<0.05$). When examining whether the difference in AMH levels has a possible effect with the severity of infection, a positive relationship between WBC, CRP, ferritin and procalcitonin measurements and the changes in the AMH value in the second measurement compared to the first measurement (AMH difference increases as WBC, CRP, ferritin, procalcitonin values increases) is statistically significant. Accordingly these results, it can be thought that the decrease in AMH levels is higher in cases with more severe disease. Similarly, a weak correlation of 0.361 was found to be statistically significant between the lymphocyte measurements of the subjects and the changes in the AMH value in the second measurement compared to the first measurement.

CONCLUSION: As a result, according to the data in our study, it is seen that Covid-19 not only causes damage in many parts of the body, but also negatively affects ovarian functions. However, as the severity of the disease increases, the severity of the negative effect on ovarian reserve also increases in correlation with it. Further studies are warranted of the reproductive involvement of coronavirus infections, particularly regarding recovered patients in a larger cohort and long-term follow-up, paying more attention to ovarian function evaluation and fertility outcomes among patients recovered from SARS-CoV-2 infection, especially in reproductive-aged women

Keywords: COVID-19, Ovarian reserve, Ovarian function, Reproductive health, SARS-CoV-2

Evaluation of Variation Between AMH Measurements

	AMH FIRST MEASUREMENT	6. MONTH AMH MEASUREMENT	DIFFERENCE	p
AMH	3.58 ± 1.51 3,01 (1,94-8,41)	3.27 ± 1.53 3,01 (1,4-9,74)	-0.31 ± 0.80 -0,25 (-2,1-1,3)	Z:-2,248 a0,025*

a: Wilcoxon Signed Ranks Test * $p<0,05$

The relationship between AMH difference and inflammation severity

	AMH FIRST MEASUREMENT	6. MONTH AMH MEASUREMENT	DIFFERENCE BETWEEN AMH VALUES
WBC r	0,170	-0,005	0,434
p	0,336	0,978	0,010*
LYMPHOCYTE r	-0,152	0,034	-0,361
p	0,392	0,849	0,036*
NEUTROPHIL r	-0,136	-0,007	-0,116
p	0,443	0,968	0,515
EOSINOPHIL r	0,047	0,158	-0,111
p	0,793	0,371	0,531
CRP r	0,254	0,080	0,542
p	0,147	0,652	0,001**
FERRITIN r	0,312	0,015	0,570
p	0,072	0,934	0,001**
PROCALCITONIN r	0,151	-0,154	0,598
p	0,393	0,385	0,001**

r: Spearman Correlation Coefficient * $p<0.05$ ** $p<0.01$

SS-134 [Jinekoloji Genel]

Impact of the covid 19 pandemic on clinical evaluation of tuboovarian abscesses

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AIM: Pelvic inflammatory disease (PID) refers to acute and subclinical infection of the upper genital tract involving any or all of the uterus, salpinx, and ovaries; this is often accompanied by involvement of adjacent pelvic organs. Tuboovarian abscess (TOA) as a complication of PID is detected in 10-15% of PID cases. TOA clinically presents as an inflammatory mass containing adnexal structures and adjacent pelvic organs. It is commonly seen in women of reproductive age. Patients apply to us with symptoms such as abdominal pain, vaginal discharge, diarrhea and fever. Serum infection markers and imaging methods (ultrasound and CT) are used when making the diagnosis. TOA is a serious and potentially life-threatening condition. Aggressive medical and surgical treatment is required along with hospitalization of patients. TOA can rupture, resulting in sepsis. This situation requires surgical evaluation. During the pandemic process, there has been a decrease in the application of patients to hospitals in our country and in the world. During the pandemic, patients with PID symptoms were treated with the diagnosis of TOA, which is a serious complication, and the delay in admission to the hospital due to the concerns of the patients. Our primary aim of the study is to compare the clinical presentations and treatments of hospitalized TOA cases in two groups as pre-pandemic and post-pandemic periods. Our secondary aim is to evaluate the predictivity of parameters indicating infection, such as serum CRP and NLR, which we evaluated because the complete blood count triggers, in patients' admission and response to treatment.

METHODS: The study was carried out retrospectively in Dokuz Eylül University Hospital Gynecology and Obstetrics Clinic. Groups with TOA diagnosis were defined as January 2018-February 2020 (Group 1, n:12) and March 2020-February 2022 (Group 2, n:10). Demographic characteristics, laboratory results, clinical findings, imaging studies and responses to medical/surgical treatment of the groups were compared. Statistical analysis was performed using SPSS version 25.0 (IBM Inc., Chicago, IL, USA). Student's t-test was used to compare parametric variables, Mann-Whitney U test, Chi-square test and Fisher precision test were used to compare non-parametric variables. A p value of <0.05 was considered statistically significant.

RESULTS: History of obstetric operation in the last year was statistically significant in Group 2 (p<0.05). The groups differ statistically in terms of treatment management (p<0.05). Although the need for emergency surgery and hospitalization time were not statistically significant, they were higher in Group 2 (p=0.5, p=0.08; respectively).

CONCLUSION: It is noteworthy that TOA cases during the pandemic period have a high need for emergency surgery and a high hospitalization time. The groups were similar in terms of infection parameters evaluated as secondary. The small number of cases seems to be the weakness of our study. However, there is no data comparing the clinical findings of TOA cases before and after the pandemic period in the literature.

Keywords: pandemic, pelvic inflammatory disease, tuboovarian abscess

Table 1. Demographic characteristics of the cases

Table 1. Demographic characteristics of the cases			
	Group 1 N:12	Group 2 N:10	P value
Age (year)	42±5.5	35.7±7.8	0.85
Menopausal status (Pre/post)	2 (%16.7)	0(%0)	0.17
Non sexually active	0(%0)	0(%0)	
Gravidity	2.5±1.5	2.2±1.6	0.6
Parity	1.5±0.6	1.6±0.9	0.9
Contraception			0.6
None	7 (%58.3)	7 (%70)	
IUD	4 (%33.3)	3(%30)	
OCP	1 (%8.3)	0(%0)	
Previous gynecological operation	0(%0)	2 (%20)	0.1
Previous obstetrics operation	0(%0)	5(%50)	0.01
Previous abdominal operation	0(%0)	0(%0)	
Immunosuppressive comorbidity	3(%25)	3(%30)	0.7
Covid test positive results		1/10(%10)	
IUD: Intrauterine device, OCP: Oral contraceptive pills			

Table 2. Laboratory examinations and comparison during the treatment

Table 2. Laboratory examinations and comparison during the treatment						
	Group 1 N:12		Group 2 N:10		P value	
	L1	L2	L1	L2	L1	L2
HB (g/dL)	11.2±1	10.5±1.2	11.7±1.3	10.8±1.7	0.4	0.3
HTC (%)	34.6±3	32.2±3.7	35.1±3.4	32.6±4.8	0.6	0.4
PLT (10 ³ /μl)	346±115	318±109	412±166	405±134	0.1	0.08
WBC (10 ³ /μl)	9.7±4.5	14.3±7.7	13.6±8.2	10.3±4.7	0.09	0.1
N (10 ³ /μl)	7.1±4.6	10.7±6.1	11.2±8.3	7.2±4.8	0.1	0.1
M (10 ³ /μl)	0.65±0.2	0.5±0.2	0.7±0.2	0.7±0.2	0.3	0.2
L (10 ³ /μl)	1.8±0.5	1.4±0.6	1.5±0.3	2±0.4	0.2	0.01
MPV (fL)	8.4±1.1	8.4±1.1	8.1±0.6	8.3±0.9	0.4	0.7
NLR	4.6±3.9	9.9±8.2	8.6±7.5	4.6±3	0.09	0.09
MLR	0.4±0.2	0.4±0.2	0.5±0.3	0.3±0.1	0.2	0.6
PLR	219±147	251±107	284±101	203±65	0.06	0.4
CRP (mg/L)	76±95		151±124		0.1	
HB: Hemoglobin, HTC: Hematocrit, PLT: Platelet, WBC: Leukocyte, N: Neutrophil, M: Monocytes, L: Lymphocyte, MPV: Mean platelet volume, NLR: Neutrophil-Lymphocyte Ratio, MLR: Monocytes-Lymphocyte Ratio, PLR: Platelet-Lymphocyte Ratio, CRP: C-reactive protein, L1: Value at diagnosis, L2: Evaluation of response to treatment for 48-72 hours						

Table 3. Clinical findings, ultrasound evaluation and treatment results of the groups

Table 3. Clinical findings, ultrasound evaluation and treatment results of the groups			
	Group 1 N:12	Group 2 N:10	P value
A) Clinical findings			0.3
Abdominal pain and vaginal discharge	9 (%75)	8 (%80)	
Diarrhea	0 (%0)	1 (%10)	
Fever	3 (%25)	1 (%10)	
B) Ultrasound			
Abscess size (cm)	5.3±2.4	5.6±3	0.9
Increased abdominal free fluid	11 (%91.7)	9 (%90)	0.8
C) CT			
Abscess size (cm)	5.1±2.2	6±3.2	0.8
Increased abdominal free fluid	10/11 (%90)	8/9 (%88)	0.8
D) Treatment management			0.03
Antibiotic	3 (%25)	7 (%70)	
Antibiotic+drainage	0 (%0)	0 (%0)	
Antibiotic+surgery	9 (%75)	3 (%30)	
E) Time to surgery (days)	8	3	0.4
F) Type of surgery			0.8
Salpingectomy	2	1	
USO	1	1	
BSO	1	0	
Hysterectomy+ USO	1	0	
Hysterectomy+ BSO	4	1	
G) Urgency of surgery	4/9 (%44)	2/3 (%66)	0.5
H) Hospitalization (days)	7±2	8.5±1.7	0.08
CT: Computed tomography, USO: Unilateral salpingo-oophorectomy, BSO: Bilateral salpingo-oophorectomy			

due to pregnancy or tumor are considered as predisposing factors. ITT is an uncommon gynecologic cause of acute lower abdominal pain in females. Clinical examination findings may mimic appendicitis, pyosalpinx, a complex adnexal cyst or a neoplasm.

Case Report: A 30-year-old patient first presented to the hospital 2.5 months ago with abdominal pain, nausea and vomiting. The patient was hospitalized with the suspicion of ovarian torsion and discharged after regression of clinical signs with medical treatment. The patient presented to the hospital with abdominal pain gradually worse, nausea and vomiting again 2,5 months after the first application. She was diagnosed with right ovarian torsion because pelvic MRI showed an enlarged, edematous right ovary; thickening and whirlpool sign of the right tube with normal left ovary. Based on color pelvic Doppler ultrasound right ovary has enlarged, edematous, heterogeneous and hyperechoic appearance and there is no flow to right ovary. Because of the clinical suspicion for adnexal torsion, she underwent diagnostic laparoscopy. During laparoscopic surgery, normal-appearing left ovaries and tube, slightly enlarged and edematous right ovary with a torsed, enlarged edematous the right fallopian tube. The right tube was torsioned 4 times around the meso. We realized that the color of the tuba gradually returned to normal 15 minutes later after the right tube was detorsioned. Plication and fixation were performed with the 'hotdog in bun' technique. After vital signs were stable in the postoperative period, she was discharged.

Comment: Laparoscopic surgical management is the gold standard approach for tubal torsion. There are several surgical approach such as tubal detorsion and fixation (conservative approach) and salpingectomy. The approach exactly depends on the patient's age, future fertilization request and tubal appearance. Conservative approach should be performed if possible in selected patients who has a fertility desire with no necrosis in the tuba after the observation. If tubal necrosis has developed, salpingectomy may be preferred. The recurrence risk after tubal detorsion is rare. The combination of fixation with detorsion is recommended in cases with history of recurrent tubal torsion. Plication with Hotdog's bun technique is performed at that situation to prevent recurrence in case with isolated tubal torsion. Our case is the first case in the literature. Therefore, it could provide a contribution in the growing literature surrounding ITT.

Keywords: Isolated tubal torsion, Laparoscopic tubal detorsion, Hotdog in bun technique

SS-135 [Endoskopi]

Case Report: The management of isolated tubal torsion with laparoscopic hotdog in bun technique

Gökhan Kılıç, Pınar Özcan

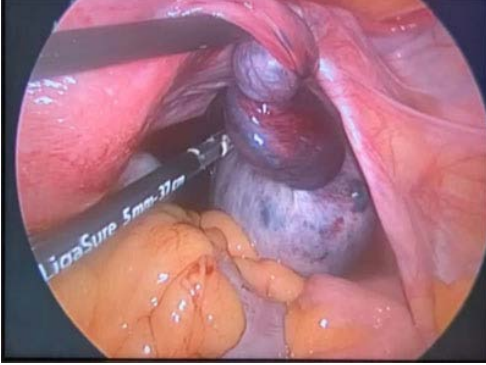
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Isolated tubal torsion (ITT) is described as the rotation of the fallopian tube on its own axis without ipsilateral ovarian torsion. Tubal torsion may occur either in the midportion of the tube or around the ligamentous supports of tube. The incidence was reported to be approximately 1/1,500,000 women. It mostly occurs in reproductive-aged women, especially in women under 30 age while it is extremely rare in menopausal women and pre-pubertal girls. Its exact cause remains unclear. Anatomic abnormalities (Congenital Mullerian duct anomalies, long mesosalpinx, hydrosalpinx, hydatis of Morgagni, tubal neoplasm), physiological abnormalities (abnormal peristalsis or hypermotility of the tube, tubal spasm), hemodynamic abnormalities (venous congestion in the mesosalpinx), sudden body position changes, trauma, previous surgery or disease (tubal ligation, pelvic inflammatory disease), and uterine enlargement

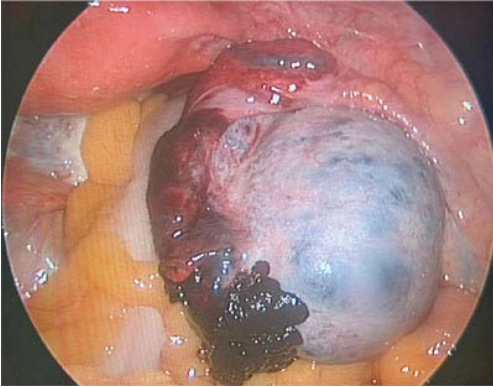
1. Pelvic MRI images



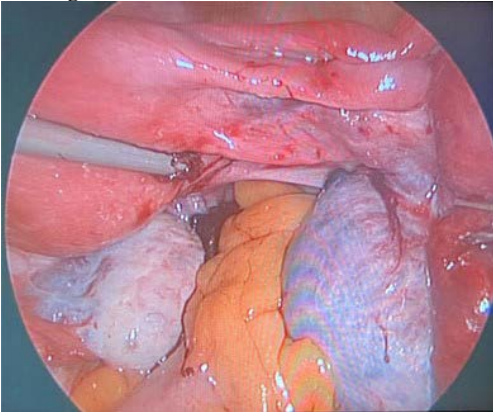
2. The right tube was torsioned 4 times around the mesosalpinx



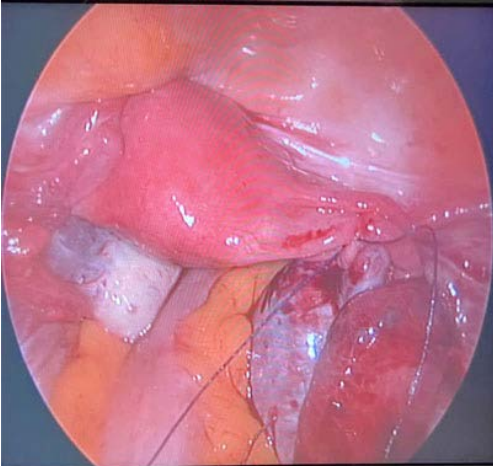
3. Image immediately after tubal detorsion



4. Image 15 minutes after tubal detorsion



5. Plication and fixation with the hotdog in bun technique



VIDEO BİLDİRİLER

VS-01 [Endoskopi]
Laparoscopic management of giant adnexal mass at 24 weeks pregnant

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İstanbul

Recent advances in technology and routine use of ultrasonography in early pregnancy have led to an increase in the diagnosis of adnexal masses(1). The incidence of adnexal mass in pregnancy varies between 1 and 6%.(1-2). Most adnexal masses are benign and ultrasound features may assist in the evaluation of asymptomatic ovarian masses. Laparoscopy can be used safely in pregnant women if necessary. Bernhard et al. Analyzed more than 18,000 obstetric ultrasounds and found a 2.3% incidence of adnexal masses in pregnancy(3). The malignancy rate in adnexal masses during pregnancy is reported to be between 1-13%(3-4).The second trimester was found to be the safest time for surgical intervention, with the lowest rates of spontaneous abortion and preterm delivery(5). A recent systematic review and meta-analysis shows that laparoscopy for the surgical treatment of adnexal masses in pregnancy is not associated with a statistically significant increased risk of spontaneous abortion or preterm labor. In addition, a proportionality meta-analysis of non-comparative studies showed that laparoscopy is associated with a lower risk of spontaneous abortion and preterm labor than laparotomy(6). In conclusion, the current literature supports that laparoscopy is a safe and effective approach in the surgical treatment of adnexal masses in pregnancy.

Case: Our case was a 27-year-old pregnant woman with a gravida 2 parity 1 (normal delivery) giant right adnexal mass at 24 weeks and 3 days of gestation. The patient applied to the clinic with the complaint of severe left flank pain. On ultrasound, there was a smooth-walled cystic lesion of 129X185X141mm in size, starting from the right lateral posterior of the uterus and extending to the liver. In the non-contrast MRI of the patient, a uniloculated thin-walled cystic lesion without a prominent solid component or septa was present, which was thought to be of right adnexal origin in the right side of the abdomen, reaching 215x110x114 mm in its largest dimensions. Surgical operation was planned under elective conditions due to the size of its size and complications that may occur in the continuation of pregnancy.. The patient was prepared in the supine position under general anesthesia. The abdomen was entered with the help of a verres needle, approximately 5 cm above the umbilicus. Abdomen distended with CO2. Inlet pressure set to 20-25 mmHg. Then, the abdomen was entered with 2 pieces of 5 trocars from the right and one from the midline. A cystic formation of approximately 20 cm was observed, originating from the right ovary, filling the abdomen from the uterus to the subhepatic area. In the operation, the cyst was ruptured with ultrasonic energy and entered into the cyst with an aspirator and approximately 1500 cc of serous fluid was aspirated. Cyst cleavage was found and removed by peeling from the cyst wall. The cyst was removed from the abdomen in gloves. The ovarian tissue was sutured after the bleeding areas were observed. USG was performed on postoperative awakening, and fetal heart rate was positive. The patient was discharged on the 3rd postoperative day.

Keywords: Laparoscopy, Pregnancy, ovarian cyst

VS-02 [Endoskopi]
Laparoscopic excision of hydatid cyst presented as an adnexial mass

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Echinococcosis is an endemic zoonotic disease and have a serious impact on global public health. Hydatid disease is caused by Echinococcus granulosus and Echinococcus multilocularis. Human can be affected by contaminated water and vegetables. The most affected area in human body is liver and followed by lung. Hydatid disease can present in some unusual places such as heart, muscle,spleen, brain,ovaries and peritoneal surfaces. Peritoneal hydatid disease is mostly associated with secondary disease caused by intraoperative spillage or spontane rupture. We present a case 34 year old Syrian women admitted to gynecologic oncology unit with an abdominal pain. Patient had a surgery history for liver hydatid disease 3 years ago. Transvaginal ultrasound showed a 40*44 mm diameter, round shaped, anechoic internal septation adnexial mass at left ovarian fossa. The tumour markers were normal and laparoscopy planned with a type 3 cyst hydatid prediagnosis. At surgery the mass was located at Douglas pouch and there was no connection with ovaries. The cyst was very close relation with left ureter after dissecting the adhesions cyst removed in a bag without spilling. Patient discharged 24 hours later and had an Albendazol treatment for 3 months.

Keywords: echinococcosis, hydatid disease, laparoscopy

VS-03 [Endoskopi]
How to remove a large submucous myoma in a virgin patient? Can hysteroscopy still a be an option?

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Vadistanbul

introduction: Fibroids are the most common benign tumours of the uterus and they are the main cause of hysterectomy due to non-cancerous reasons. At least 1/3 of the women are diagnosed with fibroids sometime during their lifetime. They can usually be managed expectantly if they are asymptomatic but if they are the cause of heavy menstrual cycles, pelvic pressure and sometimes problems of fertility, surgical intervention is warranted.

Case presentation: Herein we represent a 29 year old virgo woman who was known to have small type 0 submucous myoma which doubled in size since her last visit which was 2 years before. She had complaints of heavy bleeding during menstruation which substantially resulted in frequent hospital visits to receive blood transfusions due to deep anemia. She was offered laparoscopic removal of her submucous myoma several times by different doctors though she stayed indecisive. Her latest visit revealed a solitary 5.5cm type 0 submucous myoma which originated from right anterolateral wall of the uterine cavity and ended right above the internal cervical isthmus. After thorough information process she and her family were convinced that a need for surgery either laparoscopic

nor hysterecopic, was urgent. Upon taking her and the family's consent, hysterecopic morcellation procedure was performed which ended up in complete resection of the myoma. According to the 3 years follow-up examinations she is still fibroid-free.

Conclusion: Uterine myoma size and its location site are often considered as limiting factors when choosing the way of surgical approach. In this presentation we point out one more limitation we encounter during our daily practice which is the patient's social behaviour in the presence of a religious context. It is never easy to defeat the misleading reasons that delay the therapy. Sharing detailed information and forming strong, indigenous communication is mandatory to achieve success when dealing with subgroups within a heterogeneous society

Keywords: large submucous fibroid, heavy bleeding, virgin patient, hysterecopic morcellation

VS-04 [Jinekoloji Genel]

Laparoscopic myomectomy and uterine artery clipping

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OBJECTIVES: Uterine leiomyomas are the most common type of pelvic tumor in females. Myomectomy is the removal of only leiomyomas, leaving the uterus in place. The myomatous uterus contains numerous arterioles and venules. Therefore, myomectomy surgeries can cause significant blood loss. Leiomyomas are fed by the uterine and ovarian arteries. Ligation of the uterine and utero-ovarian arteries can decrease uterine bleeding by reducing perfusion pressure in the myometrium. Placing a large bilateral clamp across the utero-ovarian ligament is a quick and simple method to occlude uterine blood flow through the ovarian artery. These methods are also known as a successful method in controlling postpartum abnormal uterine bleeding. In our operation, we aimed to show the effect of uterine artery clipping on bleeding in laparoscopic myomectomy.

METHOD: The patient was a 39 years old with a complaint of abnormal uterine bleeding. She had a history of 2 vaginal births. The preoperative hemoglobin value was 11.1 g/dl. On the ultrasound imaging, the uterus had increased in size. There was approximately a 7 cm fibroid in the anterior region of the uterus. We started our operation with a laparoscopic entry. Initially, we created a small incision from the non-vascular region from the broad ligament on either side of the isthmus lateral to the uterine vessels. Bilateral uterine artery was detected by a posterior approach. We clipped the uterine artery on both sides. We clipped the bilateral infundibulopelvic ligament to also reduce blood flow in the ovarian artery. We coagulated the serosal surface of the uterus to reach the fibroid core. The myometrial layers were appropriately coagulated for hemostasis. We grasped the fibroid with a tenaculum for traction. We used blunt and sharp dissection to separate the plane between the myometrium and myoma. Delayed resorption sutures were placed in several layers depending on the depth of the myometrial defect. The fibroid was removed from the abdomen by morcellation. We successfully ended our operation with minimal bleeding.

RESULTS: At the 8th hour after the operation, the hemoglobin value was 10.6 g/dl. The general condition of the patient was good, vital signs

were stable. The patient was discharged on the 2nd postoperative day.

CONCLUSION: Removing fibroids that are deeply embedded in the vascular myometrium can result in significant blood loss. Temporarily blocking blood flow using uterine artery clipping to significantly reduce blood loss is a useful option for bleeding control in myomectomy surgery.

Keywords: Hemorrhage, laparoscopic myomectomy, uterine artery clipping

VS-05 [Endoskopi]

First Step in Adenomyotic Large Uterus Laparoscopic Hysterectomy; Uterine Artery Ligation

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OBJECTIVE: Hysterectomy is the most frequently performed operation after cesarean section in benign uterine pathologies all over the world. Today, total laparoscopic hysterectomy is increasingly used in minimally invasive surgery compared to laparotomy. However, a large uterus, giant fibroids, and a history of deep endometriosis are also reasons that complicate TLH surgery, and there are publications counting it as contraindications. In this described technique, it is aimed to perform uterine artery ligation by entering the retroperitoneum first in order to provide intraoperative bleeding control of adenomyotic and large uterus.

CASE: A 52-year-old patient was admitted to our clinic with the diagnosis of menometrorrhagia refractory to medical treatment. In the transvaginal ultrasonographic examination of the patient, a 9x9x7 cm uterus was observed. The uterine myometrium layer had an adenomatous appearance. The patient, who had a history of five normal births, did not have any additional disease. TLH and bilateral salpingoopherectomy were planned for the patient. The preoperative hemoglobin value of the patient was 9.7 g/dl and the hematocrit value was 29.8%. The patient was placed in the lithotomy position under general anesthesia. V-Care uterine manipulator was inserted into the uterus. An incision was made from the umbilicus and a 10 mm trocar was inserted into the abdominal cavity using the direct entry technique. Following the pneumoperitoneum, 3 5 mm trocars were entered into the abdomen from the right and left inguinal region and the left upper abdominal quadrant. After intra-abdominal control was achieved, the left retroperitoneum was opened. After monitoring the uterine artery, hypogastric artery and ureter tracing, the uterine artery was clamped at the hypogastric artery inlet and ligated. Afterwards, bilateral ligamentum suspensoriumovarii and cardinal ligaments were cauterized and cut with bipolar energy modality. Anterior and posterior colpotomy was performed over the sacrouterine ligaments with a monopolar hook instrument. With a uterine manipulator, the uterus was pulled out of the vagina by holding the cervix with a single-tooth clamp, and the uterus was removed through the vaginal route. The cuff was closed with an intracorporeal suture. The operation was terminated after bleeding control and abdominal control.

CONCLUSION: With this technique, it is aimed to control intraoperative bleeding in adenomyotic, myoma and large uteruses, and it is aimed to perform a more controlled surgery without unnecessary blood accumulation in the abdomen. Although the entrance to the retroperitoneum allows to see the ureteral trace, our technique requires laparoscopic surgery experience since it is a region where vital anatomical points are located. In order to evaluate the advantage of this technique, clinical studies in which more cases are evaluated are needed.

Keywords: Laparoscopic Hysterectomy, menometrorrhagia, uterine artery, intraoperative bleeding

VS-06 [Endoskopi]

Intraligamentary fibroid in a postmenopausal patient misdiagnosed as an adnexal mass

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This is a case of a 60-year-old woman who was admitted to the Department of Physical Therapy and Rehabilitation with the chief complaint of back pain lasting about one year. Magnetic resonance imaging (MRI) was ordered by the physician. The result was as follows: the uterus was measured as 65x45x34 millimeters, endometrium was linear, subcentimetric Naboth cysts were present in the cervix, a round solid image of 50x23x35 millimeters which maintained contrast after peripheral intravenous contrast injection with regular borders was identified in the right adnex, left adnexal structures were observed normal in structure, no pathological lymph nodes were detected and no free fluid was present. Pathologic evaluation was recommended by the radiologist. She had an history of 6 pregnancies, 3 term non-operative vaginal deliveries, 3 abortions (two were non-intentional) and 3 living children. She had no problems conceiving. Her pregnancies were completed without any obstetric problems and the newborns were healthy and in normal weight percentile. Her menarche was at 13-year-old and her menopause was at 49-years-old. Her previous menstrual cycle showed regular properties and she did not complain of heavy bleeding or premenstrual symptoms. She had no history of postmenopausal bleeding or hormone therapy. She had not been sexually active for 10 years. Past contraceptive history included male condoms. She did not complain of urinary or vaginal discharge. She did not have a history of urinary or bowel problems. Neither Pap-Smear nor HPV tests were taken before. Her past mammography scan was 7 months ago and its result was BIRADS-1 (Breast Imaging Reporting and Data Systems-1). Physical examination evidenced a normal abdomen, a moderately-supported perineum and a normal cervix. Pap-Smear was obtained which later resulted as normal cytological findings consistent with menopause. Transvaginal ultrasound revealed a normal sized anteverted uterus, a hypoechoic solid mass in the right pelvis with a size of 49x25 millimeters and an atrophic ovary in the left pelvis. All laboratory findings - including tumor markers except CA 125 (45 U/ml) - turned out to be normal in range.

Total laparoscopic hysterectomy and bilateral salpingoopherectomy was scheduled.

The uterus, the tubes and the ovaries were found to be intrinsically normal in size and structure. After dissecting the right broad ligament and the right ureter, an intraligamentary myoma of approximately 5x2x3 centimeters was visualized attached to the uterus.

Realization of total laparoscopic hysterectomy and bilateral salpingoopherectomy were proceeded. The patient was discharged 50 hours after the procedure, without any complications. Pathology reported the mass as a degenerated fibroid.

This case is notable for its rarity and diagnostic conundrum. Uterine fibroids can develop anywhere within the muscular wall. In some cases, over time, small pediculate subserous myomas are presumed to take up a blood supply from a nearby contiguous structure, detach from the uterus and begin to grow within the broad ligament. The incidence of intraligamentary myoma is < 1%. Such a relatively small incidence may cause great concern if misdiagnosed radiologically.

Keywords: Adnexal mass, fibroids, hysterectomy, laparoscopy, postmenopause, radiology

VS-08 [Jinekoloji Genel]

Laparoscopic transperitoneal infrarenal para-aortic lymphadenectomy in a patient with locally advanced cervical cancer

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AIM: To present our experience on laparoscopic para-aortic lymphadenectomy up to left renal vein in a patient undergoing surgical staging because of locally advanced cervical cancer (LACC).

STUDY DESIGN: Case report

MATERIAL-METHODS: A patient with LACC was treated in a tertiary-care academic affiliated private hospital. The diagnosis was pathologically proven and the patient underwent a PET/CT scanning preoperatively. Following pre-operative work-up, a laparoscopic transperitoneal infrarenal para-aortic lymphadenectomy was performed up to the left renal vein. The laparoscopic technique applied has previously been described (1).

RESULTS: Clinical staging of the 52-year-old patient was stage IB2 (tumour dimension larger than 4 cm.). Histopathological diagnosis was adenocarcinoma of cervix uteri. Her PET/CT scan revealed signs of pelvic lymph node metastasis only. Para-aortic area has shown no pathological FDG-uptake. The patient was offered all therapy options according to NCCN guidelines and preferred a laparoscopic para-aortic lymphadenectomy prior to radio-chemotherapy.

The operation time needed for the para-aortic lymphadenectomy was 90 minutes. The surgical removal of whole lymphatic tissue between the left renal artery and the aortic bifurcation was completely possible. There were no intra-operative or post-operative complications.

Histopathological examination has shown that three of fifteen lymph nodes were metastatic. Treatment was modified according to pre-treatment staging surgery and an extended field radiation therapy has been planned. The time interval between surgery and initiation of radiotherapy was 10 days.

CONCLUSION: Laparoscopic infrarenal para-aortic lymphadenectomy up to left renal vein is a safe and feasible option for staging and planning the optimal treatment in patients with LACC.

REFERENCE: Innovationen in der radikal- onkologischen Chirurgie: Paraaortale Lymphadenektomie. Arian G, Plath B, Ralph G. Geburtsh Frauenheilk. 2010;70:424.

Keywords: Laparoscopy, para-aortic lymphadenectomy, locally advanced cervical cancer

VS-09 [Onkoloji]

Atypical Metastatic Site of Endometrial Carcinoma. A Case Report. Video Presentation

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Atypical Metastatic Site of Endometrial Carcinoma. A Case Report. Video Presentation.

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OBJECTIVE: Metastatic tumors of the appendix are rare. Endometrial cancer tends to metastasize by directly invading close structures; the lung, liver, bones, and brain are common sites of distant metastasis. Therefore, the aim of this surgical video is to demonstrate uncommon spread pattern of the endometrial cancer.

METHODS: A step-by-step explanation of the procedure which was performed on the patient using a video.

RESULTS: The article provides information about the authors' clinical observation of a 69-year-old patient with uterine cancer metastasized to the appendix. The patient underwent complex clinical, laboratory and instrumental examinations, and during the pelvic MRI examination, a 22x14 mm tumor was found in the endometrial cavity. Abdomen CT scan with oral and intravenous contrast revealed a pathological mass of 22x14 mm in the uterine cavity, as well as a 50x40 mm tumor in the appendix. The right hemicolectomy + total abdominal hysterectomy + bilateral salpingo-oophorectomy + total omentectomy + ileotransvers anastomosis were carried out in the department of Gynecological Oncology, Azerbaijan Medical University. Pathological examination of the material revealed endometrial carcinoma in the uterine body, the appendix with endometrioid carcinoma infiltration (metastasis) in the wall. Metastasis was found in 5 of the lymph nodes. The postoperative period was uneventful.

CONCLUSION: This case demonstrates that metastatic tumors can

naturally fuse with the tissue at the site of metastasis. A correct diagnosis should be made by combining the patient's medical history with morphologic and immunohistochemical test results. The differentiation between primary and metastatic tumors is important for staging the tumor, choosing appropriate treatment, and estimating prognosis.

Key Words: Endometrium—Appendix — Adenocarcinoma—Metastasis.

Keywords: Appendix, Adenocarcinoma, Metastasis.

VS-10 [Onkoloji]

Sentinel lymph node mapping in endometrial cancer

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52y

Complaint: Postmenopausal bleeding

Endometrial biopsy: Endometrioid type endometrial carcinoma

Operation: Laparoscopic sentinel lymph node mapping and hysterectomy wit BSO

Final pathology: Endometrioid type endometrial carcinoma, stage IA, grade I, LVSI negative, sentinel lymph nodes negative (results of ultra-staging)

Keywords: endometrial cancer, sentinel lymph node mapping, laparoscopy

VS-11 [Endoskopi]

Retroperitoneal TLH of a patient with endometrioma and deep endometriosis of the ureter

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A 47-year-old woman who completed her fertility was admitted to the gynecology clinic with complaints of abnormal uterine bleeding and pelvic pain. Ultrasonographic examination revealed a 6*5 cm complicated cyst with dense content (endometrioma?) in the left adnex. MRI was reported as endometrioma. The patient's smear and endometrial sampling results were benign. Total laparoscopic hysterectomy + bilateral salpingo-oophorectomy was planned for the patient with indications of anemia (Hb:9 mg/dL) and endometrioma. Intraoperatively, an endometrioma of approximately 6x8 cm was observed in the left ovary. The left round ligament, left infundibulopelvic ligament and endometrioma were conglomerated and completely

adhered to the pelvic lateral wall. After the adhesiolysis, the left round ligament was cut and the retroperitoneal area was visualized. The left ureter was retracted towards the endometrioma along the trace. The ureter was freed up to the cross level of the uterine artery using harmonic and scissors. The ureteral trace was restored. Peristalsis was normal. The uterine artery was clarified and ligated at its origin. Then the right retroperitoneum was visualized and the ureteral trace was clarified. The right uterine artery was ligated at its origin. Afterwards, total laparoscopic hysterectomy was performed without complications by following the ureteral traces at every stage. Endometriotic foci on the left ureteral trace were also dissected and excised. There was no intraoperative bleeding. The patient was discharged two days after the surgery. Histopathology was reported as adenomyosis and endometriosis. The patient had neither dysuria nor chronic hypogastric pain, no complaints at the 3rd and 6th month follow-ups.

Keywords: endometrioma, deep endometriosis, ureteral dissection, retroperitoneal total laparoscopic hysterectomy

VS-12 [Endoskopi]

Deep Endometriosis Surgery

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Deep endometriosis, occurring approximately in 1% of women of reproductive age, represents the most severe form of endometriosis. It can cause severe pelvic pain in affected patients. Intestinal and urinary system involvement is also common. Surgical excision of deep endometriosis is mandatory in presence of symptomatic bowel stenosis, ureteral stenosis with secondary hydronephrosis, and when hormonal treatments fail. Controversy still exists regarding the best treatment choice for deep infiltrative endometriosis. Treatments; includes medical treatment with oral progestins or combined contraceptives, and surgery for resection of deep infiltrating endometriosis nodules. In this video presentation, the steps of deep rectovaginal nodule excision, ureterolysis and shaving of anterior rectal nodules in a 37-year-old patient with chronic pelvic pain were shared.

Case: Our case was 37 years old, G:2 P:2. She applied to our clinic with complaints of severe abdominal pain, low back pain, dyskinesia and dyspareunia. The patient previously used dienogest for 6 months with the diagnosis of endometriosis and stopped.

After stopping the drug, the pain continued to increase. On physical examination, the cervix was normal. A nodule was detected in the isthmic region proximal to the posterior fornix on vaginal tapping. In the transvaginal ultrasonography performed on the patient, figo type 6 myoma, the largest of which was 5 cm, was observed in the uterus. A lesion compatible with endometrioma of 4 cm in the right ovary and 3 cm in the left ovary was observed. Hydrosalpenx was observed in the right tube. A nodule of approximately 15x18 mm was observed in the isthmic region of the posterior uterus. In laboratory tests, the patient's ca 125 value was 57.4. In its current state, laparoscopic myomectomy, rectovaginal nodule excision, adhesiolysis, shaving operation for the lesion on the rectum were planned for the patient.

Operation: The patient was painted and covered in the lithotomy position under general anesthesia. The abdomen was entered from

the umbilicus with a 10-gauge trocar. Then, the abdomen was entered with 2 trocars from the left and one 5 mm trocar from the right. In the observation, figo type 6 fibroid of approximately 7 cm was observed in the left superolateral uterus. Douglas obliteration was observed. The anatomical adhesions of the sigmoid colon on the left side were opened and the okabayashi space was entered from the medial side of the left ureter. Bilateral ureters were dissected up to the bladder entrance. Hydrosalpenx was observed in the left tube and salpingectomy was performed. Then the latzio space was entered. The bilateral ovaries were hung on the abdominal wall with a handmade T lift. The rectorectal space was freed from both sides. A nodule was observed between the anterior surface of the sigmoid colon and the uterus isthmus. The part of the nodule above the sigmoid was excised by shaving. The rectovaginal nodule was removed. Approximately 15 mm nodule on the right sacrouterine ligament was excised. Serous injuries on the sigmoid colon were repaired with 3.0 vicryl. The operation was terminated after bleeding control.

Keywords: Endometriosis, Laparoscopy, endometrioma

VS-13 [İnfertilite]

Transvaginal ethanol sclerotherapy for endometrioma in 5 steps

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Objective: Endometriosis is a common gynecologic condition affecting 6%–10% of reproductive-age women. Endometriomas occur in 17%–44% of patients with endometriosis, who generally complain about pelvic pain or infertility. The conventional treatment of ovarian endometrioma has been surgery, and the most common surgical method is laparoscopic cystectomy. The surgery is associated with reduced recurrence of the endometrioma and pain symptoms. However, the ovarian reserve can be damaged. Ethanol sclerotherapy may be offered to patients with endometriomas to preserve ovarian reserve.

Background: Sclerotherapy involves injecting a sclerosing agent such as ethanol into the cyst cavity after drainage. Other sclerosing agents that have been reported for sclerotherapy of endometriomas include methotrexate, tetracycline, and ethanol, with ethanol used most commonly. Ethanol sclerotherapy leads to fibroblast proliferation, cellular dehydration, and ultimately fibrinoid necrosis of the cyst wall by producing a controlled inflammatory response. Its proposed advantages include minimizing ovarian trauma while preventing injury and removal of healthy ovarian tissue and follicles.

Methods: Ethanol sclerotherapy for endometrioma in-office procedure was performed following 5 steps. Step 1 is vaginal preparation and local anesthesia application. Step 2 consists of transvaginal puncture of the cyst and aspiration. Step 3 consists of flushing the cyst with saline. Step 4 is Injection of the 96% ethanol and waiting 10 minutes to exposure; then aspiration of its contents in Step 5.

Result: A video presented 5 steps to perform sclerotherapy of an endometrioma as an office procedure.

Conclusion: Transvaginal sclerotherapy for endometrioma is a rapid and accessible method. The standardization of this technique by this 5-step video should allow the gynecologists to consider it as an alternative to cystectomy to preserve the ovarian reserve.

Keywords: endometrioma, ethanol sclerotherapy, ovarian reserve, 5 steps

VS-14 [Jinekoloji Genel]

Laparoscopic uterine artery ligation to preserve the uterus in a patient with Asherman's syndrome

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OBJECTIVE: To demonstrate an anterior laparoscopic approach for laparoscopic uterine artery ligation to preserve uterus in a patient with an Asherman's syndrome, and an iatrogenic uterine-vessel malformation and a severe uterine bleeding.

Design: Case report

MATERIAL-METHOD: A 35 years old patient with a history of primary infertility and 10 preceding hysteroscopies, who suffered under severe uterine bleeding was admitted in our institute. She was on the course of preparation for frozen-thaw embryo transfer. Several hysteroscopies were performed to treat her Asherman's syndrome. Her last diagnostic hysteroscopy was performed in our institute and revealed that the preceding adhesiolyses caused a complete dissection of the intramascular part of the left uterine artery.

Thus, the latter was lying partly free of surrounding tissue within the uterine cavity, which apparently became postoperatively necrotic. Intermittently severe bleeding episodes occurred about one week after the diagnostic hysteroscopy. The patient was admitted in the state of shock in an external hospital and treated by several blood transfusions and readmitted into our institute after stabilisation of her vitals.

An anterior retroperitoneal dissection in the pararectal and paravesical space allowed to trace the uterine artery back to its origin from the internal iliac artery where it was ligated for haemostasis and to preserve the uterus.

RESULT: The patient was treated successfully and discharged on postoperative day 2 without complaints.

DISCUSSION: Laparoscopic technique and possible variations of anatomic structures will be discussed during the presentation.

CONCLUSION: Laparoscopic retroperitoneal dissection in the pararectal and paravesical spaces allows identification of anatomic structures and variations and the selective ligation uterine artery and its aberrant branches. This is a simple and an effective procedure not only to facilitate hysterectomies, but also to preserve the uterus in selected cases.

Keywords: laparoscopy, uterine artery ligation, Asherman's syndrome

VS-15 [Endoskopi]

Leiomyoma on the septum of a septate uterus: case report

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OBJECTIVE: To describe the case of a leiomyoma localized in the septum of a septate uterus

Design: Case report

Setting: A university hospital

Patient: A 42-year-old patient with primary infertility

Intervention: Hysteroscopic septum resection, myomectomy and polypectomy in the same session.

RESULT: In the evaluation, an appearance compatible with a septate uterus and ultrasonographic findings similar to 19x20 mm leiomyoma in the septum and 10 mm polypoid lesion in the right cavity were observed. The patient underwent hysteroscopic septum resection, myomectomy and polypectomy in the same session. Final pathology of the patient was confirmed as leiomyoma and endometrial polyp.

CONCLUSION: The association between septate uterus and miscarriage is generally accepted, while the association with infertility remains unclear. Summarizing the data, the American Society for Reproductive Medicine (ASRM) recommends that it may be reasonable to consider septum resection in affected women without infertility or prior pregnancy loss. And yet also highlights that there is insufficient evidence to support this recommendation. One of the most important issues regarding septate uterus is the lack of a universally accepted means of defining this condition. In this case we used both classification ASRM 2021, European Society of Human Reproduction (ESHRE) and Embryology/European Society for Gynaecological Endoscopy (ESGE 2016) for diagnosing septate uterus. Leiomyoma at rare localizations in the presence of uterine anomalies is a diagnostic challenge. Leiomyomas rarely have been reported to be present in Mullerian duct anomalies. They have been reported to originate from extrauterine locations such as uterine tubes, broad ligament and ovary, but these locations are rare. Until now, leiomyoma has been reported in cases with Mayer-Rokitansky-Kuster-Hauser syndrome and in an unicornuate uterus with vaginal agenesis. Leiomyoma also has been reported in cases with uterus didelphys and bicornuate uterus. In patients who have septate uterus with fertility problems and a history of obstetrical complications, should consider to approach to management to be a surgical treatment.

Keywords: leiomyoma, mullerian anomaly, septate uterus

VS-16 [Endoskopi]
Hysteroscopic intracapsular myomectomy

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Objective: Hysteroscopic myomectomy is the gold standard method for treatment of submucous fibroids. Hysteroscopic myomectomy techniques for removal of submucous fibroids still have controversies. In this study we aimed to evaluate the hysteroscopic technique for removal of large symptomatic submucous myomas.

Background: In 1976 the advent of hysteroscopic myomectomy, which was first reported by Neuwirth et al., radically changed submucous fibroid treatment. Hysteroscopic myomectomy should be a simple, well-tolerated, safe and effective procedure, preferably accomplished in a single surgical step. In hysteroscopic myomectomy slicing-related issues, underlie all intraoperative complications, such as bleeding, uterine perforation using electrical loop and the clinical intravasation syndrome. In the standard slicing technique, even in expert hands, is very difficult the myometrial and pseudocapsule sparing. During the intramural myoma removal, the pseudocapsular tissue should be always visualized over the entire resected area and in its uterine fovea, to distinguish myoma tissue, pseudocapsule and healthy myometrium. Pseudocapsule sparing during hysteroscopy also promotes myometrial healing and prevents fibrotic scarring, intrauterine adhesions and dramatic complications, such as uterine rupture.

Methods: First, we determined the fibroid anatomy. Next, we performed the excision of the intramural component by slicing. Finally, we provided hemostasis with electrosurgery.

Conclusion: There is still no single technique proven to be unequivocally superior to the others for treating fibroids with intramural development (G1–G2). Hysteroscopy seems to be an effective and safe method for resection of G1 and G2 fibroids.

Keywords: Hysteroscopy, myomectomy, uterine fibroids, resectoscopy

VS-17 [Jinekoloji Genel]
Rare Complication of H/S Isthmocol Repair

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Rare Complication of H/S Isthmocol Repair

Keywords: Complication, Isthmocol, Rare, Repair

VS-18 [Jinekoloji Genel]
Surgical management of a tuboovarian abscess on the basis of recurrent endometrioma: TLH and massive adhesiolysis

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A 46 year old women admitted to gynecology clinic with pelvic pain and vaginal discharge. She had a history of laparoscopic endometrioma surgery five years ago. In pelvic examination, cervical motion tenderness was detected and ultrasonography revealed a 54x53 mm cystic lesion compatible with tuboovarian abscess on right adnexa. The patient was hospitalized and iv antibiotic therapy (clindamycin+gentamycin) was given for seven days. The CRP value decreased from 250 to 12, but the abdominal pain did not relieve. MRI was reported as a 9 cm lesion with a solid component in the right adnexa, consistent with infected endometrioma, and surgery was decided for the patient. Intraoperatively, approximately 10-12 cm endometrioma, pyosalpinx and ruptured abscess were observed in the right adnexa. The right adnexal mass was adherent to adjacent bowel segments. There was a 3-4 cm endometriotic nodule on the left pelvic lateral wall and the left adnexa and uterus were adhered to this region. Uterus was also adenomyotic, 14 weeks in size. Douglas was obliterated. After massive adhesiolysis of bowel segments, bilateral round ligaments were cut to reveal the retroperitoneal spaces. Bilateral ureters were dissected, uterine arteries were ligated from their origin. With help of a rectal probe, the obliterated douglas was released by sharp dissection, and the 3 cm nodule on the rectum was shaved. TLH -BSO was performed without complication. The patient was discharged on the 3rd postoperative day. Histopathological results were reported as inflamed endometrioma, adenomyosis. She had no additional complaints at the 3rd month outpatient follow-up.

Keywords: tuboovarian access, deep infiltrative endometriosis, retroperitoneal total laparoscopic hysterectomy, adenomyosis

VS-19 [Jinekoloji Genel]
Laparoscopic Repair of Isthmocol: A Video Case Report

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Isthmocol (also called cesarean scar defect or niche), a pouch-like defect in the anterior wall of the uterine isthmus, is becoming more common with increasing cesarean section.

Some of it are asymptomatic but it frequently leads to gynecological problems like menstrual disturbances, secondary infertility and pelvic pain. With obstetric perspective if pregnancy ensues, ectopic (isthmocol) pregnancy, abnormal placental implantation, and possible uterine rupture may occur. It may be life threatening due to these pathologies.

The diagnosis of isthmocele can be made by transvaginal ultrasound, saline infusion sonography, hysterosalpingography or MRI. The treatment protocol of isthmocele has no consensus in recent years. Most of the professionals would agree that asymptomatic patients should not be treated unless they plan to get pregnant. Surgical treatment can be divided into an extra uterine correction of the defect by laparoscopic, laparotomic, vaginal route or hysteroscopic techniques to relieve symptoms.

Hysterectomy is seldomly indicated

Case: A 35-year-old patient who had 2 cesarean sections and had no additional features in his history. She applied to the outpatient clinic because of postmenstrual brown spotting. In the transvaginal ultrasound, a hypoechoic area compatible with isthmocele was observed in the old cesarean section scar line. Operation was planned after the patient was informed and a written consent was obtained. The defect in the patient was repaired with laparoscopic techniques.

Keywords: cesarean scar defect, isthmocele, laparoscopy, niche

VS-20 [Endoskopi]

Laparoscopic resection of cesarean section scar ectopic pregnancy followed by isthmocele repair

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OBJECTIVE: The incidence of cesarean scar pregnancy is approximately 1 in 2000 pregnancies and is increasing in parallel with increasing cesarean birth rates worldwide. It accounts for 6 percent of ectopic pregnancies among patients with a prior cesarean delivery. In the last years, its prevalence has risen due to the increasing number of cesarean sections. An early diagnosis can lead to an early management decreasing the risk of life-threatening complications such as uterine rupture and massive hemorrhage. Many therapeutic options are available, medical or surgical, but the current literature suggests that laparoscopic approach with ectopic pregnancy resection is the best option.

METHODS: To demonstrate a technique for the laparoscopic surgical management of cesarean section scar ectopic pregnancy and isthmocele using the video.

RESULTS: In this video, we describe our technique for laparoscopic management of a cesarean scar ectopic pregnancy. The patient is 36 years old, G5P2A2 who presented with a positive pregnancy test, spotting, and mild cramping. Pelvic ultrasound examination had revealed nothing in the uterus. Beta-HCG levels increased from 8134 to 24300. Due to suspicion for ectopic pregnancy, the patient was detailedly evaluated by OB/GYN experts. The patient had undergone two previous uncomplicated cesarean sections at term. She was diagnosed by transvaginal ultrasound with 6 weeks live pregnancy implanted at the level of the cesarean scar. The gestational sac was extending from the c-section scar outward. A decision was made to proceed with surgical treatment in the form of laparoscopic resection of the ectopic pregnancy. The surgery was uneventful, and the patient was discharged

home within 24 hours of her procedure. Her serial bHCG levels were followed until complete resolution.

CONCLUSION: In the experienced hands, laparoscopic treatment of cesarean section scar pregnancies is a viable and preferred option due to high success rate and low morbidity. The perform of uterine artery ligation and laparoscopic suturing can prevent hemorrhage and allow for the safe removal of the ectopic pregnancy with multilayer repair of the uterine defect. Excise all abnormal tissues to reapproximate normal tissue edges ensures success and decreases the risk of reoccurrences.

Keywords: Laparoscopy, scar, ectopic, pregnancy

VS-21 [Ürojinoloji - Rekonstrüktif cerrahi]

Lateral Suspension Surgery Performed With the V-NOTES (Vaginal-Natural Orifice Transluminal Endoscopic Surgery) Technique

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AIM: NOTES (Natural Orifice Transluminal Endoscopic Surgery) is a surgical intervention performed by entering the abdomen through one of the body's natural openings, such as the anus, vagina, or urethra. With an endoscope through a hole made in organs such as the stomach, colon, vagina, and bladder, the peritoneal cavity is entered. The surgical area is provided by filling carbon dioxide through one of these natural orifice entrances. The vaginal route is the most commonly used way of NOTES by not only the gynecologist but also the other disciplines. Many surgical procedures related to gynecologic indications is being performed such as hysterectomy, oophorectomy, salpingectomy, etc.. In the literature, suspension surgeries performed due to uterine prolapsus were the only sacrocolpopexy cases performed via V-NOTES (Vaginal-Natural Orifice Transluminal Endoscopic Surgery).

CASE: 61-year-old gravida 4 para 4 women had vaginal hysterectomy due to uterine prolapsus 5 years ago and admitted to the outpatient clinic with complainment of vaginal vault prolapsus. According to POP-Q classification system, she had grade 4 total prolapsus that the tip of the vault was 6 cm distal to the hyman. Lateral suspension, which is a kind of suspension surgery of the pelvic organ prolapsus via V-NOTES technique, was planned. During the surgery, first the tip of the vault is incised and the rectovaginal area is dissected roughly. After identifying the peritonium, the pelvis is entered by puncturing the peritoneum with the forefinger of the dominant hand. A trocar is introduced to this opening and the bilateal insertion of dissector from the skin begining from the insicion located 2 cm inferolateral to the crista iliaca through the retroperitoneum is visualized until reaching the vaginal vault. The edge of arms of the mesh sutured to the tip of the vaginal vault from the midpoint are then captured at the stage of the vault and conducted through the retroperitoneum separately to the skin level under visualization through the vaginal trocar. After optimum suspension of the vault, the edges of the mesh are fixed to the fascia to avoid re-prolapsus.

CONCLUSION: This is the first lateral suspension case in the literature that is performed with NOTES technique and this can be a good way for lateral suspension too for pelvic organ prolapsus in suitable cases.

Keywords: pelvic organ prolapsus, lateral suspension, V-NOTES

VS-22 [Ürojenekoloji - Rekonstrüktif cerrahi]

Uterosacral, Round Ligament Dissection, McCall Culdoplasty and Round Ligament Fixation to Prevent Apical Vaginal Prolapse: a New Surgical Technique

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A circumferential incision was done vaginal tissue that cover uterine cervix. Bladder tissue was dissected from uterine cervix. Posterior cul-de-sac was entered. Left and right side vaginal tissue were dissected from the uterosacral ligament and the cardinal ligament. The left uterosacral ligament was identified, grasped, cut, and sutured with number 1 vicryl (absorbable suture). After that, the cardinal ligament was grasped, cut, sutured. The same surgical procedure was performed the right side. Following this, the left broad ligament and the uterine artery were clamped, cut and sutured. When the surgical procedure reach to fundus, the round ligament was identified, separately clamped, cut, sutured, and separated from broad ligament. After this, the utero-ovarian ligament and the fallopian tube were clamped together, cut, sutured. The same surgical procedure was done right side and vaginal hysterectomy was completed. After vaginal hysterectomy, to repair of anterior vaginal wall prolapse, vaginal tissue was incised vertically and dissected from bladder fascia. This surgical maneuver allow the surgeon to better visualization of pelvic region. Then surgery turned to pelvic phase. Bilateral retrograde salpingo-oophorectomy were done as described by Kaba (1). To perform McCall Culdoplasty the left uterosacral ligament was pulled medially and inferiorly, the cardinal ligament pulled laterally and superiorly with held threads. The parietal peritoneum between them was dissected to separate the uterosacral ligament from the cardinal ligament. Uterosacral ligament was separated from the parietal peritoneum and loose connective tissues up to spina ischiadica. At the level of spina ischiadica, the ureter could be palpated in the dissected region. The separation of the uterosacral ligament serve the surgeon to security of ureter during McCall suture placement, prevent ureteral kinking, and eliminates cystoscopy requirement after operation. The same procedure was done right uterosacral ligament. The first internal McCall suture was placed approximately 2 cm near to the spina ischiadica with non-absorbable 2-0 polypropylene suture. The second suture was placed approximately two cm distal of the first suture. To place external McCall suture, a number 1 vicryl suture was passed through the posterior vaginal wall, the parietal peritoneum, left side uterosacral ligament, cul-de-sac peritoneum, right uterosacral ligament, the parietal peritoneum and vaginal wall respectively. Later a number 1 vicryl suture was passed left lateral posterior vaginal wall, free end of the cardinal ligament. After that, the round ligament was pulled outward and the needle was passed through body of ligament approximately 2 or 3 cm away from free end of ligament, and then anterior lateral vaginal wall. The same suture placement was done the right side. After these, anterior vaginal wall incision was closed with 2-0 vicryl

following Kelly's plication. Then the two internal McCall sutures were ligated. Apical vaginal wall was closed with number 1 vicryl. Finally, the two apical lateral vaginal round ligament fixation sutures and external McCall suture were ligated. Surgery was completed with posterior colporrhaphy.

References

1. M. Kaba. Retrograde salpingo-oophorectomy technique in addition to vaginal hysterectomy as a preventative approach against tuba-ovarian cancer. Eur. J. Gynaecol. Oncol. 2017, 38(6), 929-932.

Keywords: McCall Culdoplasty, Pelvic organ prolapse, Round ligament fixation, Uterosacral ligament, Vaginal apex prolapse,

VS-23 [İnfertilite]

Laparoscopic neovagina creation by using Modified Davydov Technique: A case report

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INTRODUCTION: A 21 years old woman has presented to our reproductive endocrinology unit with a complaint of amenorrhea and failure to succeed vaginal penetration during coital activity. A blind vagina which was 2 cm long from the hymenal ring was detected upon vaginal examination. Her serum gonadotropic hormone were completely in normal range. Normal caryotype (46,XX) has been revealed upon her chromosomal analysis procedure. Magnetic resonance imaging (MRI) procedure has demonstrated bilateral rudimentary uterine remnants next to normal appearing ovaries and and absence of uterus (Figure 1). Based on the outcomes, invasiveness and complication rates of currently performed neovagina procedures and informed consent of the patient, we decided to perform a laparoscopic Modified Davydov neovagina creation procedure.

CASE: Uterine agenesis and laterally localised ovaries including rudimentary uterine horns and fallopian tubes have been seen on laparoscopic view (Figure 2). A surgery assistant between the legs of the patient has pushed blind vagina upwards by using a sponge forceps. A 3 cm transverse incision was made by using L hook monopolar cautery to create a two finger width opening to the blind vagina. Anterior and posterior visceral peritoneal edges have been grasped and stitched by using 2/0 poliglactin sutures to fascilitate pulling downwards into the vaginal mucosal edge. At this part, these two peritoneal edges have been sutured to the vaginal mucosal edge by using separate 2/0 poliglactin sutures circumferentially. Two sponges have been accomodated in a sterile condom to make a soft vaginal mold which was introduced into the abdominal cavity from the vaginal space. Bilateral fallopian tubes have been resected and exteriorised from the abdominal cavity by using Ligasure energy device. A continuous purse string stitch technique has been utilized which included the left rudimentary uterine horn, bladder peritoneum, right rudimentary uterine horn, right pelvic wall peritoneum, rectal serosa, left pelvic wall peritoneum and finally left rudimentary uterine horn by using a 2/0 polydioxanone (PDS) suture to close the proximal part of the neovagina. Two additional mattress sutures

by using 2/0 PDS suture have also been used to strengthen the newly created vaginal roof (Video 1). Postoperative course of the patient was uneventful. Vaginal soft mold has been left in neovagina for 48 hours postoperatively and afterwards the patients has been advised to introduce a vaginal silicone dilator which was 10 cm long and 2 cm thick in size every night for 3 months. The patient has been discharged from the hospital on second postoperative day. The patient kept using her silicone vaginal dilator every night for 3 months and she was allowed to have regular coital activity after then. During follow up visit on 3. month following surgery, a completely healed 9 cm neovagina has been seen upon vaginal examination (Figure 3). The patient has stated that she was experiencing satisfactory coital activity with her neovagina.

DISCUSSION: Modified Davydov procedure is an efficient surgical technique with lower complication rates and vaginal stenosis rates besides higher cosmetic outcomes and sexual satisfaction rates when compared with other surgical techniques.

Keywords: Vaginal agenesis, Davydov procedure, neovagina, laparoscopy

VS-24 [Endoskopi]

Modified laparoscopic sacrohysteropexy

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Although pelvic organ prolapsus (POP) is very common among premenopausal and postmenopausal women, it also affects approximately half of the reproductive women. Laparoscopic sacrohysteropexy (SHP) is becoming an increasingly popular alternative to hysterectomy for treating uterine prolapse in women. In this report, we present the application and surgical results of the modified laparoscopic SHP (mLSHP) operation we performed in a patient with POP who demanded uterine sparing surgery.

CASE: A 41-year-old Gravida 2 Parite 3 female patient presented with the complaint of a palpable mass. In the gynecological examination, cervix was observed at the level of the hymen. According to the POP-Q staging; the patient had Stage 1 anterior, Stage 2 posterior and Stage 3 apical prolapsus and she was informed about her situation. Surgical options were offered. Since the patient demanded sparing of the uterus, a laparoscopic SHP was planned. After laparoscopic preparations were completed in lithotomy position under general anesthesia, retroperitoneal dissection was performed from S3-S4 to uterosacral ligaments. A 1 x 4 cm (trimmed to suitable size) polypropylene mesh (Ethicon®) was inserted through this retroperitoneal tunnel. The upper end of the mesh was sutured to S3-S4, and the lower end to the uterosacral ligament and cervix with a tucker. Prolene No 1 was used for the sutures. The mesh was adjusted so that the uterus was pulled back to its normal anatomic position without tension. The peritoneum was sutured with 2/0 Vicryl. The operation ended following hemostasis. Intraoperative complications such as primary hemorrhage (blood loss > 500 mL or urgent need for a blood transfusion) and visceral injury (ureter, intestines) were not observed. The patient, whose postoperative general condition was good and vital signs were stable was discharged on the postoperative day 3. The early postoperative success of the operation was defined as the level of the lowest part of

the cervix above the spina ischiadicus on digital vaginal examination at the end of the procedure and at the 6-week follow-up visit. The modified laparoscopic SHP that we performed is a technique that can be applied and preferred in selected well-cases due to its short operation time, increased patient comfort in the postoperative period, and low risk of mesh rejection and infection. Surgical options should be offered to patients diagnosed with POP according to the defect level and an appropriate surgical planning should be made. mLSHP is thought to give better results compared to the other techniques in terms of ease of application, physiological and anatomical considerations. This method should be investigated with further comparative studies and long-term results.

Keywords: Sacrohysteropexy, Laparoscopic, POP

VS-25 [Ürojinkeoloji - Rekonstrüktif cerrahi]

Laparoscopic sacrocolpopexy operation in advanced stage vaginal cuff prolapse

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OBJECTIVE: Among the surgical techniques used in the treatment of pelvic organ prolapse (POP), the laparoscopic approach has been popularized later than other methods. It is technically difficult to implement and the long learning curve has been identified as the reasons limiting the widespread use of this technique. The aim of this case report is to present the surgical experience of a patient who underwent laparoscopic sacrocolpopexy for advanced stage vaginal cuff prolapse.

MATERIALS-METHODS: A patient who underwent laparoscopic sacrocolpopexy surgery for stage 4 vaginal cuff prolapse in our clinic was evaluated. The POPQ system (Stage 0-4) was used in our study and recommended by the International Continence Society for POP staging. The video of the laparoscopic sacrocolpopexy operation will be presented.

RESULTS: 66-year-old G3P3 (3 vaginal births) patient was admitted to our hospital with the complaint of uterine prolapse. Patient's average birth weight was 3400gr (3000 – 4000). It was learned from the history of our patient that vaginal hysterectomy and left oophorectomy had been performed for the cyst of the left ovary and uterin prolapse 15 years ago. It was learned that vaginal cuff prolapse developed 1 year after the operation and she had not received any surgical or medical treatment for 14 years. In the vaginal examination, the vaginal cuff was 8 cm outside of the genital hiatus and was observed as stage-4 maximal descent. The cough stress test performed was found to be negative after the desensus manually reduced. In the gynecological examination, uterus and left ovary could not be observed in transvaginal ultrasound (operated) and the right ovary was atrophic. When the camera delivered through umbilicus to the abdominal cavity under general anesthesia, the uterus and left ovary were not observed, the right ovary was atrophic, the promontory was not evident. Due to the closure of the operation area with intestinal loops despite the forward Trendelenburg position, it was passed through the small intestine meso with No. 1 Vicryl suture and hung on the left trocar port. Prolene mesh, nonabsorbable titanium tucker and 2.0 multifilament nonabsorbable suture were used. The promontory

was seen and the peritoneum was dissected up to the vaginal cuff line with a harmonic scalpel. Anterior longitudinal ligament was detected. After insertion of the vaginal probe, bladder and rectum dissection was performed up to 3 cm from the apex of the vaginal cuff. Prolene mesh was fixed to the vaginal cuff with 4 anterior and 4 posterior sutures and then fixed to the sacral promontory with 4 nonabsorbable tuckers without tension. The ureters were visualized transperitoneally and the peritoneum was repaired with a 2-0 V-lock suture. In the postoperative examination, it was observed that the vaginal cuff increased to the level of -3 and sufficient total vaginal length was achieved. Operation time 170 min. **CONCLUSION:** Laparoscopic sacrocolpopexy can be preferred as an effective method with low morbidity even in women with cystoectocele and advanced stage vaginal cuff prolapse.

Keywords: laparoscopic sacrocolpopexy, pelvic organ prolapse, vaginal cuff prolapse, cystoectocele

VS-26 [Ürojinekoloji - Rekonstrüktif cerrahi]

Ureteroneocystostomy and psoas hitch operation after laparoscopic sacrohysteropexy with autosomal dominant polycystic renal disease

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A 61 year old patient was admitted to hospital with left flank pain on the 15th day of laparoscopic sacrocolpopexy operation. Patient had autosomal dominant polycystic disease in medical history. The patient was counseled by the urology department. Non-contrast Abdominal CT of the patient revealed right hydronephrosis. No other pathologies were observed. Laboratory workup showed increasing creatinine levels up to 4.69 mg/ d L and was oliguric for 3 days. Nephrotoxic agents were stopped, also nephrology consultation was ordered. Prerenal and renal causes were eliminated. Postrenal obstruction diagnosis was decided and for further evaluation cystoscopy was planned. Before the operation hemodialysis was done. Cystoscopy showed a normal bladder, retrograde pyelografi showed an obstruction in the upper part of the fight ureter. In ureteroscopy, complete ureteral obstruction was observed approximately 5 cm proximal to the ureteral orifice. Obstruction was confirmed with retrograde pyelography. Laparoscopic operation with ureteroscopy was planned. Patient was not suitable for nephrostomy due to the autosomal polycystic renal disease. Left ureteroneocystostomy and psoas hitch operation was made. A double J catheter was placed. After operation creatinine levels were decreased and urinary output was increased. Patient was discharged on the 3th day of surgery without complication and creatinine levels were decreased to 3.01 mg/dL without hemodialysis. A control appointment was made one month later for double j catheter removal.

Keywords: Ureteroneocystostomy, psoas hitch, laparoscopic sacrohysteropexy, autosomal dominant polycystic renal disease

VS-28 [Jinekoloji Genel]

Diagnostic Dilemma

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Our study shows the accuracy of preoperative ultrasound diagnosis of extrauterine adnexal neoplasm.

Keywords: Adnexal neoplasm, Infertility, Ultrasound.

POSTER BİLDİRİLER

EP-001 [Endoskopi]

Evaluation of abnormal uterine bleeding in women with polycystic ovarian syndrome by hysteroscopy

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OBJECTIVE: To evaluate the causes of abnormal uterine bleeding in PCOS patients by hysteroscopy.

MATERIAL-METHODS: This cross-sectional retrospective study including 117 women was performed in a private hospital between December 2017-January 2022. The ages of patients. The participants were at the age of 20-45 years.

RESULTS: The mean age of the women is 30.5 years (± 5.3). The mean BMI of the participants is 25.1 (± 3.1). The mean AMH level is 4.43 (± 1.6). Hysteroscopic findings were as follows: 26 (22.22%) polyps, 4 (3.41%) had chronic endometritis, 2 (1.70%) had endometrial hyperplasia and 85 (72.64%) had no pathological findings.

CONCLUSION: This study showed that those women with PCOS had higher incidence of endometrial pathologies and polyps were increased in this group of patients. So hysteroscopy should be done in PCOS patients with abnormal uterine bleeding.

Keywords: Abnormal Uterine Bleeding, Hysteroscopy, Pcos

EP-002 [Endoskopi]

Ureteric injury due to the use of ligaSure: post-operative identification

Muhammed Hanifi Bademkiran

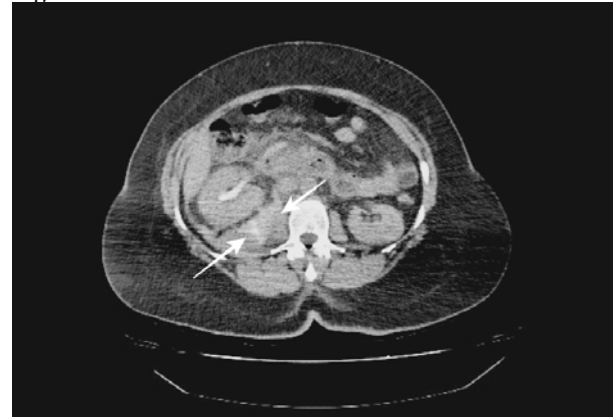
Gaziantep Üniversitesi Tıp Fakültesi, Kadın Hastalıkları ve Doğum, Gaziantep

OBJECTIVE: Ureteral injury represents one of the most severe complications of pelvic, and in particular of gynecological, surgery. The long-term consequences of ureteral injury include fistulae formation, stricture, and obstruction. LigaSure is a bipolar clamping device used in open and laparoscopic surgeries to produce hemostasis in vascular pedicles up to 7 mm in diameter. The clinical evaluation and treatment duration of a ureteral injury related to a ligasure surgical instrument, which was also used in laparoscopic total abdominal hysterectomy in one case, in the early postoperative diagnosis, is presented. Event: A patient aged 50 years underwent total laparoscopic hysterectomy (TLH) due to abnormal uterine bleeding that was unresponsive to medical therapy. A four-trocar technique (out of the primary trocar, two at the left side, and one at the right side) was used. The uterus and cervix were removed transvaginally after the uterine vessels, and the cardinal and uterosacral ligaments were cauterized and bilaterally transected. Following hemorrhage control, one Hemovac drain was placed in the abdomen, and the procedure was completed. The patient was discharged with a recommendation that her general condition, gas, and stool passing were good. In post-operative day four, the patient presented at the

emergency department of the same hospital with nonspecific complaints of pain. The USG revealed right renal pelvicalyceal dilatation (18 mm), and a urology consultation was requested. Abdominal CT examination revealed a retroperitoneal area, paraaortic-caval space, and pelvic retroperitoneal space; there was a 5 cm anteroposterior and 10 cm transverse size at the thickest displacement location (collection of liquid density) (urinoma?) (figure 2,3 and 4). The patient was informed, and a ureterorenoscopy (URS), Wolf endoscopy, 6 Fr) was performed in the operating room. During the URS, the right ureter orifice was entered with the guidance of a zebra catheter. Ureter perforation with a progression of 5–6 cm was observed. The surgeon opted to perform an open abdominal operation. Upon entering the retroperitoneal area, the surgeon observed that the right portion of the ureter was ruptured. The ureter had fullness, but partial ureter wall loss due to a burn was present in the middle section. Ureter injury was observed 1–2 cm below the right iliac vessels, prompting a ureteroureterostomy. Ureteroureteral anastomosis was performed using two-layer sutures. Outcome: The incidence of delayed, post-operative recognition of ureteric injury is significantly higher in non-urological procedures. Visualization of the course of ureters at the beginning or end of the operation may prevent complications of the urinary tract and the delayed diagnosis of ureteral injuries. Judicious and careful use of electrosurgical devices should be done in order to avoid inadvertent damage to surrounding structures. Early recognition and the involvement of a urologist can prevent long-term complications.

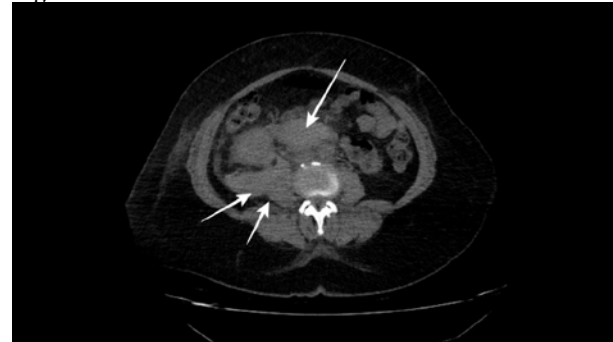
Keywords: Ureteric injury, liga-Sure, total laparoscopic hysterectomy

Figure 1



Axial plane of delayed phase of CT scan abdomen showing right perinephric region collection in high liquid density

Figure 2



Axial plane of delayed phase of CT scan abdomen showing right perinephric region collection in high liquid density

periureteric region collection in high liquid density

Figure 3



Sagittal plane of delayed phase of CT scan abdomen showing right periureteric region collection in high liquid density

EP-005 [Infertilite]

The Effect of Endometrial Thickness on the Day of HCG Injection on Reproductive Outcome in Clomiphene Citrate and Intrauterine Insemination Cycles

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Research Question: To evaluate the effect of endometrial thickness (EMT) on the day of HCG injection on reproductive outcome in clomiphene citrate and intrauterine insemination cycles (CC+IUI)
Design: Overall 640 cycles in couples with unexplained infertility or WHO Category 2 normogonadotropic anovulatory women were analyzed retrospectively. Women who received ovulation induction with clomiphene citrate and intrauterine insemination at a tertiary center between February 2019 and February 2020 were recruited. The demographic characteristics and endometrial thickness at the HCG injection day of the group who achieved with a clinical pregnancy were compared with the group who did not get pregnancy.
RESULTS: Out of the evaluated 640 cycles, 92 cases had a high β -HCG (14.4%) and 80 (12.5%) resulted in a clinical pregnancy. While 23 (23/640, 3.6%) of the cases with clinical pregnancy experienced spontaneous abortion, 52 (8.1%) resulted in live birth. Maternal age, duration of infertility and clomiphene citrate dosage were found to have an impact on the clinical pregnancy and live birth ratio. The cut-off value for endometrial thickness was 8.45 mm (sensitivity 49.4%, specificity 55.3%) for clinical pregnancy. The incidence of biochemical pregnancy was lower while the incidence of clinical pregnancy ($p = 0.010$) and live birth (LB) ($p = 0.002$) were higher in cases with an EMT > 8 -9 mm on the day of β -HCG injection.
CONCLUSIONS: EMT on the day of HCG administration, duration of infertility, maternal age and clomiphene citrate dosage are shown to be predictors of clinical pregnancy CC+IUI cycles.

Keywords: Endometrial thickness, clinical pregnancy, live birth, clomiphene citrate, insemination

ROC Analysis

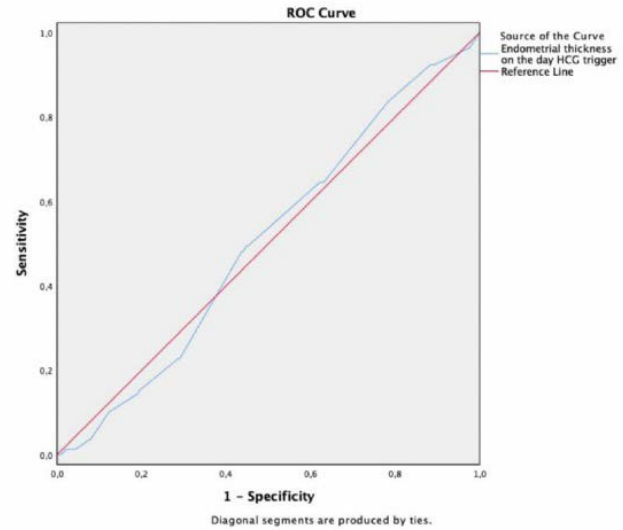


Figure-1. Receiver operator characteristic curve (ROC) of endometrial thickness on the day HCG Trigger

Distribution of results by endometrial thickness (> 8 & 9) on the day of HCG

EMT (mm)	Number (n=640)	Result			
		Chemical Pregnancy (n=12)	Clinical Pregnancy (n=80)	Spontaneous Abortion (n=23)	Live Birth (n=52)
8 - 9mm	111	0 (0%)	22 (19.82%)	3 (2.7%)	17 (15.32%)
<8, >9 mm	539	12 (2.27%)	58 (10.96%)	20 (3.78%)	35 (6.62%)
p	N/A	0.013*	0.010*	0.579	0.002*

P<0.05 statistically significant
EMT: Endometrial Thickness, HCG: Human chorionic gonadotropin.
Data are shown as numbers (percentages).
*Statistically significant

Distribution of statistically significant data

	Age	Duration of infertility	Daily CC (clomiphene citrate) dose (mg)	E2 (pg/ml) (on the day of early follicular phase)	Cycle day for IUI	Follicle number on the day HCG Trigger Day	Cycle Day of HCG Trigger
Clinical Pregnancy (+) (n=80)	26,29	2,44	62,5	46,67	13,74	1,11	11,75
Clinical pregnancy (-) (n=560)	28,1	3,04	57,23	48,3	13,13	1,24	11,11
p	0,02	0,011	0,034	0,495	0,072	0,007	0,058
Live Birth (+) (n=52)	26,31	2,52	62,5	41,11	14,02	1,1	12,04
Live Birth (-) (n=588)	28,01	3	57,48	48,7	13,13	1,23	11,11
p	0,018	0,086	0,180	0,001	0,03	0,014	0,024
Spontaneous abortion (+) (n=23)	26,57	2,39	65,22	54,41	12,96	1,09	10,96
Spontaneous abortion (-) (n=57)	26,31	2,52	62,50	41,11	14,02	1,10	12,04
p	0,704	0,631	0,001	0,453	0,145	0,903	0,138

EP-006 [İnfertilite]

The effects of serum estradiol, progesterone and LH levels on oocyte count, oocyte quality, embryo quality and pregnancy results in ivf antagonist cycles on the day of ovulation trigger with hCG

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AIM: Evaluation of the effects of serum estradiol (E2), progesterone (P4) and luteinizing hormone (LH) levels measured on the day of ovulation trigger with hCG in IVF antagonist cycles on oocyte count, oocyte quality, embryo quality and pregnancy outcomes. The secondary aim of the study is to determine the incidence of premature luteinization in IVF-ET cycles applied with the antagonist protocol in our clinic and to evaluate the effects of premature luteinization on oocyte count, oocyte quality, embryo quality and pregnancy outcomes.

MATERIALS-METHODS: In our Infertility and IVF Clinic, anamnesis and laboratory results of patients who underwent IVF treatment with an antagonist protocol in 2021 and who met the criteria for inclusion in our study were scanned, and the patients' age, gravida, parity, abortion, ectopic, living child, duration of infertility, cause of infertility, AMH level, All data on stimulation time with FSH, total dose of FSH administered, serum estradiol, LH and progesterone levels on the day of triggering with hCG, number of oocytes retrieved, oocyte quality, number of embryos retrieved, age of embryo transferred, embryo quality and pregnancy outcomes were obtained. was done. The relationships between estradiol, LH and P4 levels and oocyte count, oocyte quality, embryo count, embryo quality and pregnancy outcomes, the incidence of premature luteinization and the effects on IVF treatment results were investigated. Statistical analyzes were performed using the appropriate tests with the help of SPSS version 23.0 program.

RESULTS: A total of 473 individuals were included in the study. The mean age of the patients was 34.19 ± 5.49 years. The mean duration of infertility is 5.45 ± 3.92 years. The mean oocyte count of these patients was 6.43, the mean embryo count was 2.96, and the mean embryo age transferred was 3.25 days. The most common cause of infertility among patients is low ovarian reserve (DOR) (44.39%). Then, respectively, oligo-astheno-teratospermia (OAT) (21.35%), unexplained infertility (20.29%), DOR + OAT (7.39%) are seen. When we compared clinical measurements according to pregnancy results, it was concluded that estradiol measurements differed statistically in positive and negative cases ($p < 0.05$). When the progesterone measurement level is grouped as below 1.5 and above, oocyte count, oocyte quality and M1 and GV levels differ significantly compared to 1.5 and above ($p < 0.05$). In our study, the incidence of premature luteinization ($P4 > 1.5$ ng/ml) was found to be 12.4%. Negative correlations were found between LH levels and oocyte and embryo quality.

CONCLUSION: Estradiol level was found to be significantly higher in cases where the pregnancy result was positive than in cases where it was negative. No significant relationship was found between LH and P4 levels and pregnancy outcomes. While progesterone measurement levels are above 1.5, oocyte count and oocyte quality M1, GV measurement levels are significantly higher. There was no significant difference in embryo quality and number and pregnancy results.

Keywords: IVF, LH, progesterone, estradiol, pregnancy, infertility.

EP-007 [İnfertilite]

Management of patient with complete müllerian agenesis (Mayer-Rokitansky-Kuster-Hauser syndrome) and pelvic ectopic kidney: a case report

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INTRODUCTION: Müllerian agenesis, also referred to as müllerian aplasia, Mayer-Rokitansky-Küster-Hauser syndrome, or vaginal agenesis, has an incidence of 1 per 4,500–5,000 females. Müllerian agenesis is caused by embryologic underdevelopment of the müllerian duct, with resultant agenesis or atresia of the vagina, uterus, or both. The ovaries, given their separate embryologic source, are typically normal in structure and function, though they may be found in atypical locations. In a large series, 78% of affected patients had normal ovaries, 16% had an extra-pelvic ovary, and 6% had a unilateral hypoplastic ovary. In addition, approximately 25-50% have urological anomalies such as unilateral renal agenesis, pelvic or horseshoe kidneys. The most important steps in the effective management of müllerian agenesis are correct diagnosis of the underlying condition, evaluation for associated congenital anomalies, and psychosocial counseling in addition to treatment or intervention to address the functional effects of genital anomalies.

CASE: A 31-year-old female patient presented with the complaint of ongoing bleeding and short vagina after coitus. On physical examination, height 160 cm, no hirsutism, no acne, breast development was Tanner stage V, pubic bristling was Tanner stage V. Her genetic karyotype was 46,XX, and her hormonal assays were evaluated as normal. The external genitalia was normal. The vaginal canal is markedly shortened and may appear as a dimple below the urethra. Cervix was not detected. Uterus could not be evaluated in transvaginal ultrasonography. Pelvic kidney was observed. Pelvic MRI was planned (Figure 1, Figure 2). It was decided that the patient, who was re-evaluated after MRI, was not suitable for vaginoplasty because of the ectopic kidney in the pelvis. The patient was offered a dilator with the Frank procedure, and when it was controlled, it was found that the vaginal length increased.

CONCLUSION: Primary vaginal elongation by dilation is the appropriate first-line approach in most patients because it is safer, patient-controlled, and more cost effective than surgery. Functional success was defined as the ability to have intercourse, vaginal acceptance of the largest dilator without discomfort, or having a vaginal length of 6 or 7 cm. Self-correcting non-surgical treatment is recommended by the American College of Obstetricians and Gynecologists. A common non-operative approach to creating a functional vagina uses vaginal dilators (Frank procedure or Ingram modification) and has been quite successful. In cases in which surgical intervention is required, referrals to centers with expertise in this area should be considered because few surgeons have extensive experience in construction of the neovagina and surgery by a trained surgeon offers the best opportunity for a successful result. Historically, the most common surgical procedure used to create a neovagina has been the modified McIndoe (skin graft) operation. Less invasive laparoscopic surgery, such as with modified Vecchietti or Davydov procedures, is now a more widely accepted

option. Postoperative dilation is essential to prevent significant neovaginal stenosis and contracture; therefore, these techniques are not recommended if the patient objects to dilation. Dilators must intermittently be used until the patient engages in regular and frequent sexual intercourse.

Keywords: Müllerian agenesis, Mayer–Rokitansky–Kuster–Hauser syndrome, Frank procedure, Pelvic ectopic kidney.

Figure 1. Pelvic ectopic kidney image in coronal pelvic MRI section.



Figure 2. Pelvic ectopic kidney image in sagittal pelvic MRI section.



EP-008 [Infertilité]

Clomiphene citrate effect on ovarian response in normo responder freeze all vitro fertilization cycles

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Antalya IVF Center

OBJECTIVE: To compare 100 mg clomiphene citrate effect on oocyte yield and fertilization outcomes in normo responder patients going under freeze all IVF cycles.

Design: Prospective randomised study

Setting: Private fertility clinic

Materials-METHODS: This data is the preliminary report of oocyte yield and fertilization outcomes of an ongoing prospective study. In this study 56 normo responder, age <37 women underwent antagonist controlled ovarian stimulation protocol for intracytoplasmic sperm injection (ICSI) and extended embryo culture to blastocyst stage. All embryos are frozen and planned for transfer with an artificial endometrial preparation. Patients are randomised by computer algorithms used in house clinic.

Of those 56 women, 26 women (group CC-1) had 100 mg clomiphene citrate just at the first day of ovarian stimulation with the gonadotropins (300 FSH+150 HMG) and 20 women (group CC-0) had just gonadotropins (300 FSH+150 HMG). Flexible antagonist protocol is used, when follicles reach 12-13 mm antagonist (cetorelix acetate 0.25mg) started. Trigger off oocytes done with gonadotropin releasing hormone agonist (triptorelin acetate 0.2) when ≥3 follicles reach 17-18 mm in diameter. Student's t test and Chi-square test were used for statistical comparisons.

RESULTS: There were no statistically significant ($p < .05$) differences when we compare baseline characteristics of patients groups regarding age, infertility duration, body mass index, antral follicle count, ovarian stimulation duration, daily and total gonadotropin dosage. Both groups (CC-1 and CC-0) have comparable oocyte numbers (14 vs 16.5), oocyte recovery (%65.6 vs % 69.9), fertilization (%87 vs %87.8) and total freeze (%80.8 vs %85) rates.

The CC-1 group had better oocyte maturity, blastulation per 2PN and blastulation per oocyte but did not reach a statistically significant level. This may be due to the low number of patient groups, as the study continues the differences may reach a significant level at the end of the study.

CONCLUSIONS: Clomiphene citrate 100 mg single day usage at the start of the ovarian stimulation has no effect on oocyte and fertilization outcomes in normo responder patients in antagonist IVF cycles.

Keywords: antagonist, clomiphene citrate, ovarian stimulation, normo responder

CC-1 day study

CC-prime (1 day) ovarian stimulation

	CC-1 (300+150)	CC-0 (300+150)	p-value
Female age (yrs)	30.3 (27.1-32.8)	30.9 (28.0-36.7)	= 0.513
Infertility duration (yrs)	5.0 (2.75-7.0)	3.5 (2.13-6.0)	= 0.510
BMI (kg/m ²)	26.0 (21.25-30.00)	25.5 (24.00-29.75)	= 0.943
AFC (n)	17.0 (10.5-22.25)	13.0 (12.0-20.0)	= 0.573
OS duration (FSH-days)	11.0 (10.0-11.0)	10.0 (9.250-12.0)	= 0.768
Total daily dose	450	450	
Total dose (FSH)	4725.0 (4050.0-4950.0)	4500.0 (4162.5-5400.0)	= 0.611
Oocytes (n)	14.0 (8.0-23.5)	16.5 (11.0-20.8)	= 0.602
Freeze-all rate (%)	80.8	85.0	= 0.723
Oocyte recovery rate (%)	65.6	69.9	= 0.772
Oocyte maturity (%)	58.7	53.0	= 0.118
Fertilization (%)	87.0	87.8	= 0.527
Blastulation per 2PN (%)	48.4	37.3	= 0.286
Blastulation per oocyte (%)	27.9	18.5	= 0.128

EP-009 [Infertile]

Comparison Of Menstrual Cycle Changes With Copper Intrauterine Device And Subdermal Implant One Year After Insertion

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Abstract

AIM: Contraceptive-induced alterations in menstrual bleeding may lead to method discontinuation and should be an important part of the contraceptive counseling. In this study, we aimed to compare the menstrual cycle changes with a copper intrauterine device (Cu-IUD) to that of an etonogestrel subdermal implant one year after insertion.

MATERIAL-METHODS: The research included women aged 18 to 45 who sought contraception at a tertiary women's hospital in Turkey between January 2020 and December 2021. Participants were between the ages of 18 and 45, prefer IUDs or subdermal implants for contraception, and commit to using the chosen method for a year. Women <18, >45 or who were menopausal, had an endocrine condition, known hematologic diseases, or were on anti-psychotic medicines were excluded from the research. Data were obtained from electronic medical files. Patients' demographic and medical histories, as well as gynecological complaints (dysmenorrhea, dyspareunia), previously used contraceptive methods, menstrual pattern (menstrual duration, frequency, self-reported average menstrual blood loss defined by the number of pads used on the second day of menstruation), intermenstrual bleeding, physical exam findings, were all documented in electronic medical records. Women who selected a subdermal progestin implant received a 69 mg etonogestrel carrying single-rod implant (Nexplanon®, Merck, Whitehouse Station, NJ), while those who preferred an IUD received a Cu-IUD (SMB copper t 380A, Kadıköy, İstanbul). The menstrual pattern data was processed in accordance with FIGO's 2018 revision of the terminology for normal and abnormal uterine bleeding symptoms (AUB) one year after contraceptive method use. IBM SPSS.25 program was used in all analyzes and p<0.05 was accepted as the level of significance.

RESULTS: There was no significant difference between the patients in the 'Implant' and 'Cu-IUD' groups in terms of age (36.24 ± 7.39 vs

34.72 ± 8.54), menstrual frequency, number of pads used on the 2nd day of menstruation, and the incidence of intermenstrual bleeding (p > .05) before method use. After contraceptive method use the duration of menstruation (7.00 ± 3.52) and the number of pads used on the 2nd day of the cycle (3.66 ± 1.53) was significantly higher in the patients in the 'Cu-IUD' group compared to the patients in the 'Implant' group (4.36 ± 3.26, 2.33 ± 1.55, respectively). (p<.001 and p<.001, respectively) and the range of intermenstrual period was wider (0-90) and longer in the implant group when compared with the Cu-IUD group however the difference was not statistically significant (Table 1).

CONCLUSION: Intermenstrual period was longer and menstrual bleeding was lower in the implant group when compared with the Cu-IUD. The etonogestrel-bearing subdermal contraceptive implant can be a favorable choice for women who prefer to have lighter and less frequent menstruation.

Keywords: etonogestrel, implant, copper intrauterine device, menstrual cycle

Table 1. Comparison of continuous variables

	Implant (n=33)		Cu-Rin (n=80)		p value
	Mean ± SD.	Median (Min. - Max.)	Mean ± SD.	Median (Min. - Max.)	
Age*	36.24 ± 7.39	36 (22 - 50)	34.72 ± 8.54	34 (23 - 52)	.308
Gravida*	2.61 ± 1.64	2 (0 - 7)	2.68 ± 1.25	3 (1 - 7)	.494
Parity*	2.15 ± 1.23	2 (0 - 6)	2.10 ± 1.02	2 (0 - 5)	.984
Previous menstrual frequency *	28.27 ± 3.68	30 (15 - 30)	29.12 ± 3.11	30 (15 - 35)	.322
The number of pads used on the 2nd day of the menstruation (previous) *	2.52 ± 1.46	3 (0 - 5)	3.06 ± 1.32	3 (2 - 10)	.136
Subsequent menstrual frequency*	32.85 ± 18.09	30 (0 - 90)	28.72 ± 3.59	30 (15 - 35)	.536
Subsequent menstrual duration*	4.36 ± 3.26	4 (0 - 15)	7.00 ± 3.52	6 (2 - 20)	<.001
The number of pads used on the 2nd day of the menstruation (subsequent)*	2.33 ± 1.55	2 (0 - 5)	3.66 ± 1.53	3 (2 - 10)	<.001

* Mann Whitney Test

EP-010 [Infertile]

Spontaneous Ovarian Hyperstimulation Syndrome, A Rare Clinical Entity From Turkey

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BACKGROUND: Ovarian hyperstimulation syndrome (OHSS) is the serious complication of assisted reproduction technologies (ART). Gonadotropin stimulation is in charge of enlarged ovaries but the masterchef is exogenous human chorionic gonadotropin (hCG). HCG induces granulosa cells for massive luteinization and expression of vascular endothelial growth factor (VEGF). VEGF plays a main role of pathophysiology of OHSS. VEGF increase vascular permeability and lead to fluid shift into the extravascular area. It is responsible for abdominal ascites, pleural/ pericardial effusion, hypovolemia, oliguria and electrolytic disorders. Haemoconcentration is other result of fluid

extravasation and increase the risk of tromboembolism. The known risk factors for developing OHSS before gonadotropin administration are: previous OHSS, polycystic ovary syndrome (PCOS), basal serum anti-müllerian hormone (AMH) >3.3 ng/mL, antral follicle count (AFC) >8 and risk factors related to ovarian response are: multiple follicles >20 follicles larger than 10 mm, fast rising of serum estradiol level (>3500 pg/mL) high number of oocytes retrieved, hCG given for luteal phase supplementation and pregnancy (increase in endogenous hCG).

CASE REPORT: A 24-year-old patient was admitted to our hospital with seven weeks pregnancy and severe ovarian hyperstimulation syndrome. She did not use any medication for ovulation induction. Abdominal ultrasound showed a live single intrauterine pregnancy at seven weeks, bilateral enlarged multicystic ovaries and massive ascites. She was hospitalized with diagnosis of spontaneous OHSS. In addition to antiemetic therapy and maintaining fluid and electrolyte balance, she received cetrorelix (gonadotropin-releasing hormone (GnRH) antagonist) and cabergoline (dopamine 2 receptor agonist) to decrease production of VEGF. She underwent an abortion with her own request. We performed paracentesis to reduce her discomfort. Ten days later, she was discharged from hospital when her symptoms regressed.

CONCLUSION: Although spontaneous OHSS is rare, several cases were reported during multiple pregnancies and hydatidiform moles which having high hCG concentration. Some cases were associated with hypothyroidism which having high levels of thyroid-stimulating hormone (TSH). Follicle-stimulating hormone receptor (FSHR) mutations may be responsible for spontaneous OHSS. The FSH receptor mutations, ligand specificity is reduction and HCG can activate the mutated receptor. Dopamine agonist agents (DA) inhibit increased vascular permeability therefore they are effective for OHSS prevention. There is not enough data on the efficacy of DA in the treatment of OHSS. However, some small studies suggest that it may reduce clinical symptoms and severity. GnRH antagonists are a potent inhibitor of the cell cycle; they decrease the synthesis of locally produced growth factors. In some reports, decreased secretion of VEGF is seen in human granulosa luteinized cells cultured with antagonists. In the management of moderate and severe OHSS, the need for paracentesis, the hospitalization rate and the need for intensive care have been reported to be significantly lower with the use of antagonist.

In our case, whose critical clinical findings did not improve dramatically despite pregnancy evacuation, the use of DA and Cetrorelix antagonist contributed positively to the clinical course.

Keywords: ovarian hyperstimulation syndrome, pregnancy, spontaneous ovarian hyperstimulation syndrome

EP-011 [İnfertilite]

Hysterectomy in a male patient with persistent Mullerian duct derivatives

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GOAL: Disorders of sex differentiation (DSD) is a rare condition in clinical practice and still poses a challenge to clinicians in terms of diagnosis and management. Surgical correction of internal genitalia for functional goals and prevention of degenerative changes in the remnants

and malignant transformation of gonads is imperative. Persistent Mullerian duct syndrome (PMDS) is a form of DSD characterized by patients, genotypically an phenotypically male with the presence of Mullerian duct derivatives. This entity is often misdiagnosed due to a lack of familiarity. Here we reporting a rare case of PMDS where the late presentation was due to infertility.

CASE: A 31 year old patient presented at our outpatient clinic with the complaint of azoospermia. He had previously presented with abdominal pain at an emergency department of another hospital. On general physical examination, patient had well-developed male facial features and male external genitalia. But both testicles were found to be absent in scrotal sac. His previous abdomen CT with contrast showed a rudimentary uterus measuring 79x21 mm and proximal vagina. Along with the fallopian tubes, symmetric solid masses were observed on both sides mimicking undescended testicles. A karyotype was conducted, and this revealed a 46XY variant. Patient was hospitalised for surgery. During surgery, both testicles were found to be occupying the position of ovaries measuring approximately 6x4 cm which were excised along with the uterus and adnexa. Histopathology report revealed testicular germ cell neoplasia in situ (seminoma) arising from testis.

RESULTS: Early presentation and early diagnosis are crucial in the management of PMDS. Late presentations can have various detrimental effects starting from problems of infertility to development of malignancy. Despite varying managements on individual basis, surgery improves outcomes.

Keywords: mullerian anomaly, hysterectomy, azoospermia

EP-012 [Jinekoloji Genel]

Chronic uterine rupture

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Introduction: Rupture of the pregnant uterus is an unusual but life-threatening obstetrical situation, which is associated with high perinatal and maternal morbidity and mortality. Uterine rupture during pregnancy can sometimes be a devastating clinical situation after hysteroscopic septum resection due to myometrial damage.

Presentation of Case: We present a patient who underwent an hysteroscopic uterine septum resection and experienced chronic uterine rupture during her subsequent pregnancy.

Conclusion: As a result, clinicians using hysteroscopy should be sensible of the potential risks and, inform the patients about the risk of uterine rupture in their subsequent pregnancies, especially in the case of with the use of electrosurgery. Considering hysteroscopic metroplasty, the use of rigid scissors should be preferred, while current monopolar section must be avoided.

Keywords: Uterine septum, Hysteroscopy, Electrosurgery; Pregnancy

Fig1:Right fundal complete uterine rupture.



Fig2:Rupture tamponade by fetus.



Fig3: Repaired uterine rupture.



EP-013 [Jinekoloji Genel]

A Case Of Isolated Tubal Torsion In The 1st Trimester Of Pregnancy

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Isolated fallopian tube (ITT) torsion without involvement of the ovary is an extremely rare condition, observed in 1 in 1.5 million women of reproductive age. Most of the cases occur in nonpregnant women but approximately 12% of isolated tubal torsion were diagnosed during pregnancy (1). We present a case of isolated fallopian tube torsion. It is a challenging preoperative differential diagnosis because of its non-specific clinical findings and is often diagnosed during surgery. A 33-year-old, gravida 3, para 1, abortus 1 with a previous cesarean section patient at 11 weeks of gestation was referred to our hospital because of acute right abdominal pain that began 2 days prior to visit. Ultrasonography performed in our hospital revealed a single live fetus at 11 weeks of gestation with normal amniotic fluid and placenta as well as a 7cm sized hypoechoic cystic mass in the right lower quadrant. Doppler ultrasonographic examination revealed normal blood circulation in both ovaries. However, radiological report revealed an anechoic mass unrelated to the ovaries and uterus in the pelvis and torsion should be excluded by clinical evaluation. MRI of the lower abdomen was requested for differential diagnosis. The pain of the patient did not go away with painkillers in her right lower abdomen, did not subside and tended toward exacerbation within 24 hours of admission, we performed percutaneous ultrasound-guided needle aspiration from the hypoechoic

cystic mass. As there was no reduction in pain despite all these attempts, at the 48th hour of his application with a preliminary diagnosis of right adnexal torsion, appendicitis, or rupture of right ovarian cyst exploratory laparotomy was performed. During laparotomy exploration we see the uterus was 3 months old, the left fallopian tube both ovaries and the appearance and size of the appendix were normal. Right Tubal torsion was observed in the pelvis. The tube had rotated six times around its axis and right salpingectomy performed due to the edematous, necrotic image of the right tuba. The surgery was completed without any complication. The postoperative recovery of the patient and follow-up of her baby were uneventful. The patient was discharged on the 2nd post op day. Polyclinic control is recommended for pregnancy follow-up. A histological examination revealed that the wall of the fallopian tube was severely edematous and congested. Isolated tubal torsion is a difficult case to diagnose and requires clinical experience. We in our case could not make the correct diagnosis preoperatively. We delayed surgical intervention in an attempt to find a source of pain. In cases of acute abdomen in pregnancy, with detailed doppler flow ultrasound evidence of normal ovaries and of a pelvic cyst, an isolated tubal-paratubal cyst torsion should be considered, and surgical intervention should be done without waiting. Given the non-specific presentation of tubal torsion, it provides a rather difficult medico-legal challenge.

Keywords: Isolated tubal torsion, pregnancy, acute batin

EP-015 [Jinekoloji Genel]

Can Hemogram Inflammatory Markers be Used to Predict Length of Hospital Stay After Total Laparoscopic Hysterectomy for Benign Indications?

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PURPOSE: To investigate the possible effects of inflammatory parameters obtained from complete blood count in the post-operative first day of total laparoscopic hysterectomy, to the length of hospital stay in patients without any complications.

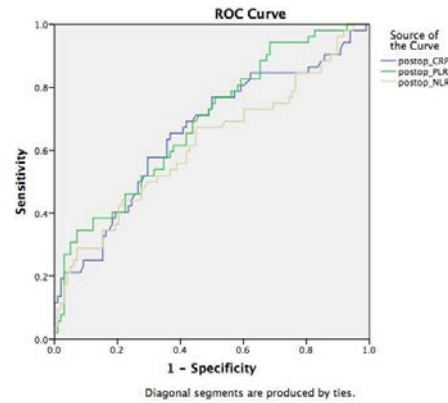
METHODS: Linear regression analysis was performed to find associations between hospital stay and the associated variables. Receiver operating characteristic curve (ROC) analysis was performed to determine the cut off values of postoperative neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR) and C-reactive protein (CRP) for long hospital stay (>3 days). **RESULTS:** Correlation of duration of hospital stay was seen with post-op NLR ($p<0.001$), post-op PLR ($p<0.001$), and post-op CRP ($p<0.001$) in linear regression analysis. In ROC analysis, post-op CRP of 25 mg/L with a sensitivity of 65% and specificity of 63% (AUC:0.657, $p=0.002$, CI 0.563-0.752), a post-op PLR of 159 with a sensitivity of 60% and specificity of 58% (AUC:0.688, $p<0.001$, CI 0.600-0.776) and post-op NLR of 4.96 with a sensitivity of 60% and specificity of 58% (AUC:4.96, $P=0.017$, CI 0.520-0.717) were found to be able to estimate long hospital stay.

CONCLUSION: We observed direct correlation between postoperative

first day values of NLR, PLR, and CRP with the length of hospital stay. NLR, PLR and CRP values are suggestive for predicting the length of hospital stay and can be used instead of each other.

Keywords: benign gynecologic surgery, hospital stay, neutrophil to lymphocyte ratio, platelet to lymphocyte ratio, total laparoscopic hysterectomy

figure 1



Receiver operating characteristic curves for neutrophil to lymphocyte ratio (NLR), platelet to lymphocyte ratio (PLR), and C- reactive protein (CRP) for the prediction of long hospital stay.

Correlation of the length of hospital stay with associated variables.

	r†	p
Age	0.033	0.686
BMI	0.072	0.381
Operation time	0.080	0.331
Intraoperative bleeding	0.056	0.493
Pre-operative NLR	0.056	0.497
Pre-operative PLR	0.055	0.501
Post-operative NLR‡	0.332§	<0.001
Post-operative PLR‡	0.325§	<0.001
Post-operative CRP (mg/L)	0.404¶	<0.001

BMI, body mass index; NLR, neutrophil-to- leucocyte ratio; PLR, platelet-to-lymphocyte ratio; CRP, C-reactive protein

EP-016 [Jinekoloji Genel]

Vaginal Smear Test Results of Patients Presenting to Our Pathology Department Between 2011 and 2020 in the Middle Anatolia Region of Turkey

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AIM: Cervical cancer is the ninth most common gynecologic malignancy in women in our country. Its mortality has decreased with the introduction of screening tests after the twentieth century; 85% of the mortality related to cervical cancer is seen in underdeveloped and undeveloped countries. The aim of this study was to evaluate the

results of cervical cytology of patients who presented to the pathology laboratory of our hospital for vaginal smears between 2011 and 2020 according to the Bethesda 2014 classification.

METHODS: The vaginal smear test reports of 121,537 patients who presented to our pathology laboratory between January 2011 and December 2020 were retrospectively reevaluated. The Bethesda 2014 classification was used for evaluating the results. The data obtained from electronic patient records and the Medical Pathology Department archives were assessed according to the years.

RESULTS: The distribution of 121,537 admissions across the years was as follows: 2011: 7915; 2012: 12,211; 2013: 14,912; 2014: 11,907; 2015: 10,170; 2016: 12,234; 2017: 12,756; 2018: 12,846; 2019: 13,124; and 2020: 13,462. All patients were aged 17-65 years; the mean age was 46.52±11.85 years. HPV was detected in 3.3% of 2020 year. The sample adequacy rate was 99.3% and the epithelial cell anomaly rate was detected as 1.5%. Intraepithelial lesions and malignancy were not detected in 98.5% of the cases, and the highest rate of inflammation was observed as 11.8%. Bacterial vaginosis (5.7%) was the most common inflammation, and Herpes simplex infection was the second (0.4%). In addition, atrophic findings were observed in 5.6%, endometrial cells in 1.7%, and glandular cells after hysterectomy in 0.5% of the samples.

Squamous cell anomalies constituted 1.3% of epithelial cell anomalies (1.5%). Among the squamous cell anomalies, atypical squamous cells of undetermined significance (ASCUS) was 0.86%, low-grade squamous intraepithelial lesions were 0.22%, suspected atypical squamous cells were 0.22%, high-grade squamous intraepithelial lesions were 0.08%, and squamous cell carcinoma was 0.01%. Atypical endocervical cells (0.01%) were the most common glandular cell anomalies, and endocervical adenocarcinoma (0.003%) was the least common.

CONCLUSION: Cervical smear and HPV DNA tests have an important role in defining cervical intraepithelial lesions. Regional and national screening programs should be widely used to prevent the transformation of precancerous lesions into invasive cancer because cervical smear and HPV DNA tests have an important role in defining cervical intraepithelial lesions. In this way, mortality due to cervical cancer and the rate of unnecessary medical interventions will decrease along with the reduction in colposcopy referral.

Keywords: cervical cancer, human papillomavirus, screening, vaginal smear

The Distribution of Vaginal Smear Results

Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
The number of the vaginal smear (n, %)	7915 (6.51)	12211 (10.04)	14912 (12.27)	11907 (9.8)	10170 (8.36)	12234 (10.07)	12756 (10.5)	12846 (10.57)	13124 (10.80)	13462 (11.08)	121537 (100)
Age (years)	51.44±12.09	49.90±12.03	50.95±11.15	49.64±11.10	45.49±12.82	45.25±12.78	43.56±12.14	43.24±11.86	43.16±11.42	42.56±11.18	46.52±11.85
The number of negative for intraepithelial lesion or malignancy (n, %)	7819 (98.8)	12048 (98.7)	14709 (98.6)	11740 (98.6)	10019 (98.5)	12052 (98.5)	12563 (98.5)	12635 (98.4)	12909 (98.4)	13727 (98.3)	119721 (98.5)
Squamous Cell (n,%)	83 (1.04)	144 (1.1)	184 (1.2)	147 (1.2)	133 (1.3)	161 (1.3)	177 (1.3)	188 (1.4)	193 (1.5)	210 (1.6)	1620 (1.3)
Glandular cell (n,%)	13 (0.16)	19 (0.15)	19 (0.12)	20 (0.16)	18 (0.17)	21 (0.17)	16 (0.12)	23 (0.18)	22 (0.16)	25 (0.18)	196 (0.16)

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Age (years)	51.44±12.09	49.90±12.03	50.95±11.15	49.64±11.10	45.49±12.82	45.25±12.78	43.56±12.14	43.24±11.86	43.16±11.42	42.56±11.18	46.52±11.85
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EP-017 [Jinekoloji Genel]

Ectopic adrenal tissue in the fallopian tubes associated with uterine smooth muscle tumors of uncertain: a case report

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INTRODUCTION: Ectopic adrenal tissue is a very rare entity in adult females, and is generally diagnosed incidentally during surgery. Although it can present at various sites during childhood, it becomes atrophic by adulthood due to normally functioning adrenal glands. Patients are predominantly asymptomatic; however, in some cases endocrine symptoms such as hypertension and fasciotruncal obesity due to hormonal activity can be seen or neoplastic transformation can appear.

PRESENTATION OF CASE: A 54-year-old patient with menorrhagia, and pelvic pain was evaluated by transvaginal ultrasound, which revealed uterine mass measuring 8 cm in size and enlarged uterus with an increased endometrial thickness of 17 mm. Initially the endometrial sampling result was reported as benign. The patient underwent total abdominal hysterectomy and bilateral salpingo-oophorectomy and the pathological diagnosis was uterine smooth muscle tumors of uncertain. The pathologist also reported incidental ectopic adrenal tissue in the right fallopian tube.

DISCUSSION: Ectopic adrenal tissue is infrequent in female genital organs especially at older ages. Only a few cases of fallopian ectopic adrenal tissue have been reported. To the best of our knowledge the present case is the third report in the English literature, and is of additional importance given the patient's age. Ectopic adrenal tissues are generally asymptomatic and revealed incidentally during surgery; however some cases have demonstrated the risk of neoplastic transformation. Therefore, surgeons must be aware of this rare entity that bears the risk of malignancy, and should surgically remove all suspicious lesions.

Keywords: Adrenal, Ectopic, Fallopian tubes

EP-018 [Jinekoloji Genel]

Desmoid tumor of anterior abdominal wall: a rare case reportDerya Burkankulu¹, Kübra Hamzaoglu Canbolat¹, Ayşe Betül Öztürk², Sena Özcan², Hayrettin Çıray³¹Department of Obstetrics and Gynecology, Buca Seyfi Demirsoy Education and Research Hospital, İzmir, Turkey²Department of Obstetrics and Gynecology, Tepecik Education and Research Hospital, İzmir, Turkey³Department of Pathology, Buca Seyfi Demirsoy Education and Research Hospital, İzmir, Turkey

OBJECTIVE: Desmoid tumors originate from fibroblastic monoclonal proliferation of one mesenchymal cell and characterised by infiltrative growth and local recurrence, but not metastasis. These tumors constitute less than 3% of soft tissue tumors and approximately 0.03% of all neoplasms (1). Although it is seen in the 15-60 age range, it is rare in young people and older adults (2). It manifests itself as a palpable tumor often accompanied by signs of pain or compression. Estrogen stimulation and pregnancy affect sporadic primary desmoid tumor oncogenesis (3).

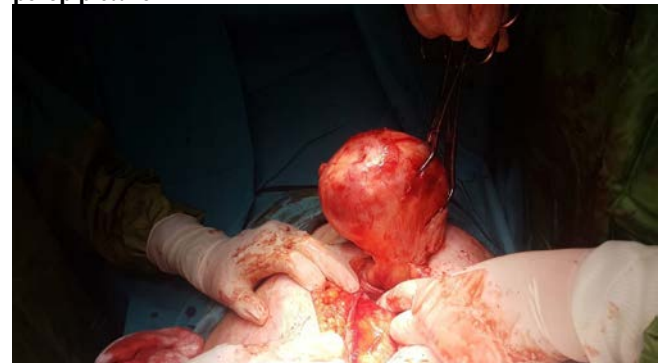
In 20-30% of cases, there is a history of previous trauma or abdominal surgery. 5-15% of cases are associated with familial adenomatous polyposis (4). Definitive diagnosis is provided histologically. The first-line treatment in operable symptomatic patients is extensive resection of the tumor and adjacent tissues. (5) Desmoid tumor of abdominal walls can be confounded with parasitic myomas and because they share considerable similarity. Because of the different patient prognoses and treatment strategies available, accurate pre-operative diagnosis is important. We report a rare case of a desmoid tumor located in the abdominal wall in a female patient.

METHOD: Patient was 25-years-old woman who presented to the clinic with abdominal pain and abdominal swelling. She had no history of abdominal trauma, surgery, or genetic disease. The history of her family is unremarkable, as there is no similar case reported in the family or proven genetic abnormalities.

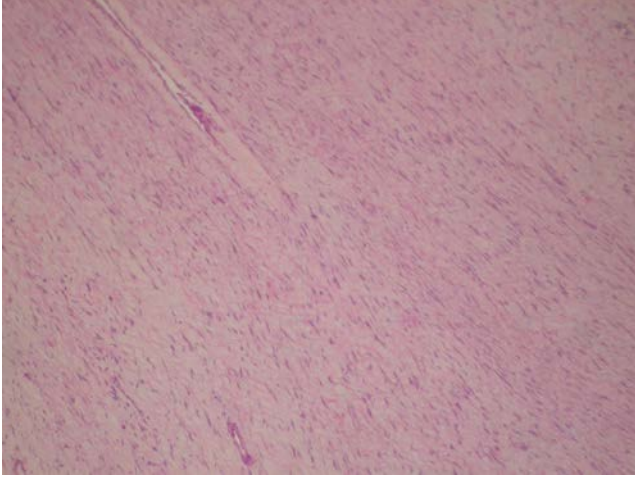
RESULTS: Ultrasonography revealed a solid abdominal mass with maximum diameter of approximately 10 cm, similar to parasitic degenerate myoma. Moreover, a mass occupying her anterior abdominal wall from suprapubic area to umbilicus was palpated. Surgery was performed to establish a definite diagnosis and treatment for the patient. At surgery, a 10-cm mass was found in the rectus abdominis under the fascia which was completely excised did not enter the abdominal cavity. Each layer opened was closed with suture and no mesh was needed. The tumor measured 10 × 10 × 8 cm with a capsule that originated from abdominal muscles. Histopathological findings showed that a neoplasm consisting of spindle-like mesenchymal cells with small eosinophilic nuclei, infiltrating the adjacent fat and muscle tissue was observed. In the neoplasm, rough collagen bundle structures, presence of foreign body giant cells and sparse mitotic activity were noted. No necrosis was detected. The tumor was diagnosed as a desmoid tumor based on positive immunohistochemical staining for β-catenin and negative staining for CD34, desmin, pancytokeratin, EMA, CD-117. The Ki-67 labeling index was approximately 3%. The patient was discharged on the 2nd postoperative day without any complications. No recurrence occurred during the 4 month follow-up. The patient will be followed up with CT imaging every 6 months postoperatively.

CONCLUSION: Desmoid tumors and parasitic myomas are important conditions that should be considered in the differential diagnosis of masses located at abdominal wall. Desmoid tumors of abdominal wall are rare and may present with various symptoms and findings similar to those observed in our patients. Imaging is a helpful tool for diagnosis but its value is limited. Surgery is the main treatment for resectable desmoid tumors.

Keywords: Abdominal wall, desmoid tumor, fibromatosis, surgical excision

perop picture

β-catenin positivity in desmoid tumor



EP-019 [Jinekoloji Genel]

Ureteral kinking following McCall culdoplasty in women undergoing vaginal hysterectomy for pelvic organ prolapse: a case report

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OBJECTIVE: Pelvic organ prolapse (POP) is the herniation of pelvic organs to or beyond the vaginal walls (1). Prolapse surgical repair was the most common inpatient procedure performed in women older than 70 between 1979 and 2006 (2). POP affects the quality of life in at least 50% of women who have given birth (3). The incidence of vault prolapse after hysterectomy varies between 1.8% and 43%, depending on the presence of POP prior to surgery (4). Therefore, international guidelines recommend prophylactic suspension of vaginal apex during hysterectomy (5). Several vaginal cuff suspension techniques have been described at the time of vaginal hysterectomy. These techniques include McCall Culdoplasty, sacrospinous ligament fixation, and Shull suspension (6). Ureteral injury is among the most common complications seen in female pelvic surgery. More than 50% of iatrogenic ureteral injuries are due to gynecological surgeries (7).

METHOD: We report a case of bilateral ureteral kinking in a woman who had undergone vaginal hysterectomy and McCall Culdoplasty for pelvic organ prolapse diagnosed on the first day after surgery.

RESULTS: A 56-year-old female patient (G8P5A3) with no notable medical history applied with the complaint of vaginal mass due to prolapse and inability to perform activities of daily life. During the physical examination, grade 3 cystocele, grade 3 rectocele and descensus uteri accompanied by positive cough stress test were observed. The patient underwent vaginal hysterectomy, McCall Culdoplasty, colporrhaphy anterior and posterior. Hydronephrosis was observed in the right kidney by urinary ultrasound which was performed because the patient became anuric on the first day after surgery. The levels of urea and creatinine, which were normal in the preoperative period, increased up to 46 and

1.58, respectively. Contrast-enhanced computed tomography (CT) urography was performed in order to evaluate the urinary tract. On CT urography, bilateral dilated renal pelvises and ureters were seen with the obstruction of ureters below the promontory level. The transfer of contrast material to the bladder was not observed. The patient was consulted with the urologists and the decision of diagnostic laparoscopy and cystoscopy was made. During the diagnostic laparoscopy, it was observed that the placement of McCall's culdoplasty sutures caused kinking of ureters bilaterally below the promontory level. McCall suture was released to recover the ureteral kinking and double-J stent was placed to the ureters which were seen normal in size by fluoroscopy. The double-J stent was removed in postoperative first week with no occlusion observed in the ureters.

CONCLUSION: Although half of the ureteral injuries are not diagnosed intra-operatively, it is crucial to manage ureteral injury in a timely manner for avoiding the permanent damage and renal failure. For that reason, extreme caution should be exercised for the follow-up of postoperative urinary symptoms in gynecologic surgeries. Moreover, intraoperative cystoscopy may be beneficial to detect the injury of the lower urinary tract that could have serious consequences.

Keywords: cystocele, McCall culdoplasty, pelvic organ prolapse, ureteral kinking, vaginal hysterectomy,

bilateral ureteral dilatation image in the postoperative period



EP-020 [Jinekoloji Genel]

Management of spontaneously occurred isolated hematocervix case

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Hematocervix is a very rare condition in which blood or blood clot is found in the cervix. It usually occurs after a surgical procedure involving the cervix. Hematocervix presents with lower abdominal pain and can be diagnosed with transvaginal ultrasound. A 45-year-old patient with no risk factors for hematocervix was administered to the outpatient clinic with new-onset amenorrhea and severe abdominal pain. Ultrasonography and MRI showed a fluid collection in the cervix. The patient was treated with simple dilation and drainage under general anesthesia. The diagnosis, follow-up and treatment are presented with the review of the literature.

Keywords: abdominal pain, amenorrhea, hematocervix, hematometra

Figure 1a and 1b. MR image in hematocervix case

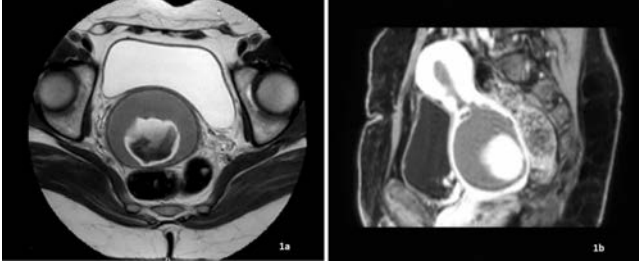


Figure 2. The hysterometer can be seen within the cystic structure in the cervical canal – arrow, the blood clot, which is the probable cause for the obstructed external cervical ostium – arrowhead



Figure 3. Postoperative ultrasonographic image of the hematocervix case



EP-021 [Jinekoloji Genel]

Direct hysteroscopic endometrial sampling and Pipelle sampling in perimenopausal women

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BACKGROUND: Abnormal uterine bleeding is a common cause of hospital admission in perimenopausal women. It can be the first sign of many diseases such as endometrial cancer and endometrial hyperplasia. Endometrial sampling is valuable in early diagnosis and treatment. Although hysterectomy is the gold standard in the diagnosis of endometrial pathology, it is not considered an acceptable method for diagnosis. With the principle of “see and treat”, hysteroscopy seems to be the most successful method.

METHODS: After obtaining the necessary ethics committee approval, we obtained liquid-based cytology samples of our perimenopausal patients who frequently applied to our outpatient clinic with abnormal uterine bleeding. To conduct endometrial sampling of our patients, we used Pipelle aspiration method in our 75 disease group and direct hysteroscopic sampling method in our other 75 disease group. We then compared the pre- and postoperative pathology results.

RESULTS: There was no statistically significant difference between preoperative and postoperative pathological results in both Pipelle and hysteroscopic sampling groups.

CONCLUSIONS: Evaluation of endometrial pathologies by hysteroscopic method and Pipelle method has high sensitivity and specificity. Gynecologists may determine the method preference according to the status of the health system together with their patients.

Keywords: Accuracy, Endometrial sampling, Hysteroscopy, Pipelle, Sensitivity

EP-022 [Jinekoloji Genel]

Advantages and recommendatory of percutan abscess drainage for the treatment of tubo-ovarian abscess: three case reports

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BACKGROUND: Tubo-ovarian abscess (TOA) is an inflammatory mass of the fallopian tube, ovary, and other adjacent pelvic organs that can cause severe sepsis or ending up with being fatal. While infection grows, tissue planes are lost with the destruction of normal pelvic anatomy with following adhesion formations. These adhesions may complicate the surgery and rise complications related to the surgery defined as intraoperative injury to an internal organ. Surgery options are laparotomy or the minimally invasive management of the treatment laparoscopy, ultrasound-guided drainage (UGD), and computed tomography-guided drainage. We investigated percutan abscess drainage of tubo-ovarian abscess (TOA) in three case in order to carry out successful treatment, and result in improved outcomes.

HIGHLIGHTS: We present three cases of up to 10 cm diameter TOA patients treated with percutan abscess drainage. Case 1 39-year-old multiparous woman revisited our emergency room complained of lower quadrant pain dysuria and nausea. Magnetic resonance imaging revealed left paracholic site almost 15 cm portion persistent with a tubo-ovarian abscess and rupture site where it was wrapped with 11 cm pu in all abdomen, thus UGD was performed. The patient experienced no abdominal pain without any abnormal condition in the post period of the UGD and the purulent material in the left paracholic guide place almost 650 ml/day and the right side 550 ml/day. 2nd Case was a 30-year-old multiparous female had hospitalized with lower abdominal pain, fever, and increased inflammatory markers (CRP 325 gr/dl; WBC 29 000). 10-cm tumor with rim enhancement in Douglas place was detected by Computed tomography. Hence, a very likely tubo-ovarian abscess was implicated. The patient abruptly had been admitted to undergo transvaginal UGD, and then an immediate antibiotic treatment was started. As for the 3rd Case who was a 33-year-old multiparous woman presented to the hospital with ultrasonographic findings right 10*8 cm adnexal mass suggested a ruptured acute appendicitis. The patient experienced no abdominal pain without any abnormal settings when she was presented the hospital however she only had increased inflammatory markers (CRP 403 gr/dl; WBC 32 000). All patients were treated successfully with UGD.

CONCLUSIONS: It's important to conclude that whether a patient had better to be hospitalized and treated with combination of antibiotherapy and surgical methods or percutaneous drainage. The surgeons should be cautious in the management of adnexal masses that should be medicated with discretion, whether the patient is symptomatic or not. Patients who treated with image-guided drainage have highest success rates, less complications and shorter lengths of hospital stay compared with surgery procedures or conservative management with antibiotics. It's one of the most important problems for surgeons to decide on what kind of operation should be applied to patients with rupture of tubo-ovarian abscess most likely inducing intra-abdominal sepsis. Furthermore, surgeons should not forget the high mortality rates in patients diagnosed with intra-abdominal sepsis. Correct decision will be helpful for patient reducing morbidity, adhesions, needless surgery that is radical and harmful to ovaries.

Keywords: tubo-ovarian abscess (TOA), treatment, percutan apse drainage

EP-023 [Jinekoloji Genel]

Incomplete duplicated ureter detected after cesarean section, Case report

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Iatrogenic injury during cesarean section of ureteral duplication, which is rare, has not been reported in the literature. In this case, ureteral injury was considered due to left flank pain on the 1st day after emergency cesarean section. In ureterorenoscopy, a double J (DJ) stent was applied to the left ureter. Computed tomography was performed because the flank pain persisted and fever was high. CT revealed incomplete ureteral duplication and DJ stent draining the lower pole of the kidney. Upper pole nephrostomy was performed because hydronephrosis was present. Antegrade nephrostography showed no contrast passage to the bladder. Diagnostic ureterorenoscopy and ureter reconstruction were planned to be performed after 3 months of follow-up. Antegrade nephrostography performed at the end of this period showed a passage and antegrade DJ stent was applied. Both DJ stents were removed with recovery after 2 months. Early diagnosis of iatrogenic urinary system injury greatly affects the success of treatment. However, it is important to consider congenital variations as well.

Keywords: Cesarean section, Ureter, Injury

EP-024 [Jinekoloji Genel]

Aspiration and Shirodkar Cerclage For Cervical Heterotopic Pregnancy Following ICSI/FET Cycle: Management a Patient with a Respiratory Symptoms

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OBJECTIVE: To report cervical heterotopic pregnancy followed by assisted reproductive techniques (ART) by the reduction of cervical implantation with endocervical curettage and Shirodkar Cerclage by the effects of Covid pandemic.

Design:

Case Report

Patient: Cervical heterotopic pregnancy following intracytoplasmic

sperm injection/fresh embryo transfer (ICSI/FET) cycle.

Intervention: Transabdominal ultrasound guided endocervical curettage and Shirodkar Cerclage together used. Later on, vaginally progesterone treatment.

RESULT: A viable intrauterine pregnancy and decreased fetal-maternal complications.

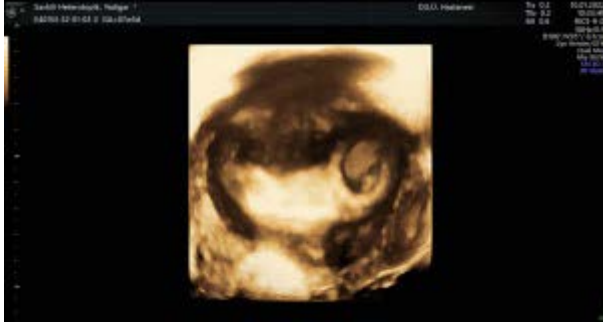
CONCLUSION: Transabdominal ultrasound guided endocervical curettage and Shirodkar cerclage can safely manage cervical heterotopic pregnancy following ICSI/FET cycle.

Keywords: Heterotopic pregnancy, IVF, Shirodkar cerclage, Endocervical curettage

3D view of Intrauterine Pregnancy



3D view of Intrauterine Pregnancy



After the Procedure, Endocervix



Cervical Heterotopic Pregnancy USG Diagnosis



Intrauterine Pregnancy



EP-025 [Jinekoloji Genel]

Cervical Myoma and Ovarian Cyst Surgery, After Supracervical Hysterectomy

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OBJECTIVE: Uterine fibroids (also known as leiomyomas or myomas) are a common form of benign neoplasms of the uterus in 20–40% of women of reproductive age. Unlike uterine leiomyomas, cervical leiomyomas are very uncommon with a low frequency for all uterine fibroids.

In this case report, we describe the vaginal operation of a patient with a cervical myoma that developed after a supracervical hysterectomy.

CASE: A 48-year-old female patient was referred for an ovarian cyst that had been revealed by magnetic resonance imaging (MRI) after the consultation for low back pain. This patient, who has had 2 pregnancies and 2 live births (gravida, 2; parity, 2) with Cesarean section deliveries, has a history of supracervical hysterectomy that was performed during the last Cesarean section. In her first examination: speculum natural pathology was not observed. On bimanual examination, the cervix was mobile and natural, and right adnexal fullness was detected. A 3.5 cm diameter solid lesion, thought to be myoma, was observed on the cervix. In the right adnexal area, a solid structure with a diameter of 3.5 cm, which is thought to be the right ovary, and a tubular structure with a diameter of 6.5x3.5 cm, which is thought to be a hydro tube, were observed. Tumor markers were CA125: 12,8 and CA19-9: 4,8. The patient was consulted with a gynecologic oncologist.

Malignancy was not considered after gynecologic oncology evaluation. For the patient, a vaginal operation with removal of fibroids and cervix, and cystectomy were planned. Firstly, the anterior dissection was carried out; and then the uterovesical fold opened. (Figure 1) Sacrouterine ligaments were clamped, cut, ligated. The cervix and fibroids were totally removed (Figure 2). The ovarian cyst was removed by ligating it with the ovary at its junction. All specimens were sent to pathology. The patient was discharged in the two-day postoperative period as no complications developed. This patient came to our clinic for a follow-up visit 10 days later. No pathology was observed in the examination. Results of pathology were Active chronic cervicitis, immature squamous metoplasia, focal koilocytic changes, Paratubal cyst, fresh and old bleeding findings and leiomyoma.

CONCLUSION: Cervical leiomyoma is the most common cervical benign tumour. For patients who are scheduled for supracervical hysterectomy, the possibility of the development of uterine fibroids from the cervical tissue should be considered. This decision should be made by considering the pros and cons of the supracervical hysterectomy for the patients.

Keywords: Cervical leiomyoma, Supracervical Hysterectomy, vaginal surgery

figure 1



figure 2



EP-026 [Jinekoloji Genel]

Necrotizing fasciitis following abdominal hysterectomy: Report of a Case

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AIM: To present a case of necrotizing fasciitis after abdominal hysterectomy
Case Presentation: 45 year old women gravida:3 parity:3 admitted to our clinic with the complaint of heavy menstrual bleeding. The patient had a history of hypertension and uncontrolled diabetes. Heavy menstrual bleeding was unresponsive to medical treatment. Preoperative ultrasound examination revealed a submucosal myoma with 4 cm in diameter. An abdominal hysterectomy procedure was performed and no intraoperative complication was encountered. Urine output and vital signs and hemoglobin change was normal at postoperative 1st day. Nausea occurred on the second postoperative day. Physical examination revealed normal vital signs and mild tenderness at incisional site. A Contrast-enhanced tomography was performed and the patient was consulted with general surgery. Subileus was diagnosed in the patient and 3*1 enema was administered. The skin was open under general anesthesia and necrotizing fascia was observed. Necrotized area of approximately 15 cm * 10 cm in diameter was debrided. Wound culture was taken from the patient. E.coli was isolated from debrided wound culture. The patient was followed up with a general surgeon, plastic surgeon, infectious diseases specialist. Teicoplanin 1*400 mg tazocin 3*1 4,5 mg treatment was initiated. After the operation, the patient was treated with 2*1 open wound dressing and four times wound debridement in the intensive care unit for one month. The patient, who took tazocin 3*1 4,5 mg A total of two months of teicoplanin, one month of tazocin, and then one month of meropenem treatment was given. During the treatment period, calcium potassium replacement was performed.

DISCUSSION: The necrotizing fasciitis is a medico-surgical emergency, characterized by the rapid spread of the infection in the subcutaneous tissue, involving fascia superficialis. Paucity of cutaneous findings early in the course of the disease makes diagnosis a challenge for physician. Pain out of proportion to clinical findings, fever and signs of systemic toxicity are the keys in identification of necrotizing fasciitis. Delayed diagnosis lead to sepsis syndrome and/or multiple organ failure and correlate with poor outcome. Radiographs, CT-scan or MRI are main radiologic studies, but such procedures should never delay surgical intervention(1). The patient must then be taken to the operating theatre without unnecessary delay and undergo aggressive surgical debridement. These operations often require a multidisciplinary team, which should include a plastic surgeon. The adequacy of initial debridement significantly affects a patient's chances of survival. It must be extensive and include the diseased fascia. It is difficult to remove all infected tissue at the first operation and several debridement are often required(2).
CONCLUSION: Necrotizing fasciitis is a rare, rapidly progressing infection that requires urgent intervention. It can rarely be seen after sterile surgery, as in our case. Debridement should be performed quickly when necrotizing fasciitis is suspected.

Resources:

1. Smeets, L et al. "Fasciites nécrosantes: stratégie diagnostique et thérapeutique" [Necrotizing fasciitis: diagnosis and treatments]. Revue medicale de Liege vol. 61,4 (2006): 240-4.

2. Jallali, Navid. "Necrotising fasciitis: its aetiology, diagnosis and management." *Journal of wound care* 12.8 (2003): 297-300.

Keywords: Abdominal hysterectomy, necrotizing fasciitis, wound debridement

EP-027 [Jinekoloji Genel]

Varicella infections during pregnancy and literature review

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Chickenpox (caused by varicella zoster virus-VZV) is a viral infection which courses with specific vesicular skin lesions. VZV during pregnancy is very important due to possibility of maternal varicella pneumonia, congenital varicella syndrome or neonatal varicella infection which can course with 30 % mortality risk. Antiviral treatment, and varicella immunoglobulin therapy (VZIG) reported to be effective in decreasing morbidity and mortality rates. This article discusses monitorisation and treatment of VZV infection in a patient diagnosed in the 18th week of pregnancy before birth with assisting literature.

Keywords: Chickenpox, varicella, pregnancy, varicella zoster immunoglobulin

EP-028 [Jinekoloji Genel]

Hormonal status in infertile women with hyperandrogenemia

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Background. Hyperandrogenemia is an endocrine disorder caused by high secretion or high activity of male sex hormones. This pathology is observed in 5-7% of women. In the pathology, 20% of women do not experience pregnancy or have a miscarriage. The purpose of the current research was to study the hormonal status of infertile women with hyperandrogenemia, depending on the level of Anti-Müllerian Hormone (AMH).

Material and Methods. 33 infertile women (I group) with hyperandrogenemia (excluding hyperprolactinemia, hypothyroidism, autoimmune thyroiditis) and 30 healthy women (II group) were involved in the examination. All women have been examined and treated for the infertility. Body mass index was determined according to weight and height indicators in women. In all women, the prolactin, estradiol, Follicle-stimulating hormone (FSH), luteinizing hormone (LH), AMH, Inhibin A and Inhibin B hormones in blood were determined on the 3rd day of menstruation with an immunoferment analyzer. According to the level of AMH, women were divided into 2 groups: subgroup included women with an indicator of A – AMH level < 600 pg/ml and subgroup B with AMH > 600 pg/ml.

Results. There is an increase in AMH secretion in patients with hyperandrogenia. In the infertile women who were examined, the AMH level was 742 pg/ml on average. In 23 women, the AMH level was below 600. Estradiol and Inhibin A were lower in IA subgroup and Inhibin B in IB subgroup. The LH level was lower in the IA subgroup than in the IB subgroup. Also, there was a significant direct correlation between estradiol and FSH in the IA subgroup. **Conclusion.** The present study proves the importance of determination of Inhibin A, Inhibin B, Estradiol, FSH and LH in the lower and upper limits of AMH than 600 pg/ml depending on the level of AMH in the evaluation of ovarian reserve in infertile women with hyperandrogenemia.

Keywords: Hyperandrogenemia, Infertility, Antimüllerian Hormone, hormonal status

EP-029 [Jinekoloji Genel]

Laparoscopic ectopic pregnancy operation in a patient with severe endometriosis who became pregnant with in vitro fertilization

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OBJECTIVE: Widespread adhesions are observed in the abdominal organs in patients with advanced endometriosis. The aim of this case report is to convey our laparoscopic surgery experience as a result of a patient who became pregnant with assisted reproductive techniques and followed up with the diagnosis of endometriosis, applied with acute abdomen due to tubal ectopic pregnancy, in the watch conditions.

METHODS: In the watch conditions, a ruptured ectopic pregnancy was diagnosed in Başakşehir Çam and Sakura City Hospital, where she applied with right lower quadrant pain. She was taken to emergency surgery and laparoscopic adhesiolysis and right salpingectomy were performed.

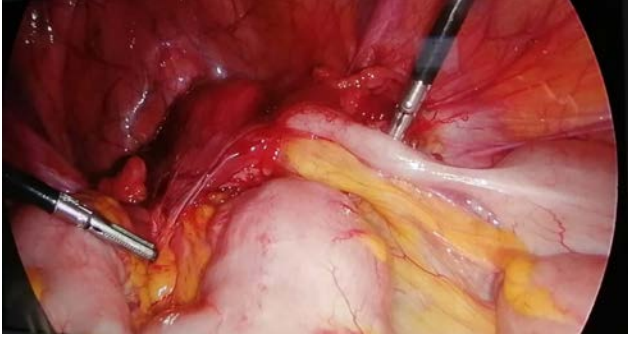
RESULTS: As a result of the gynecological examination performed in a 37-year-old patient with gravida 1 parity 1 vaginal delivery 1 who applied to our hospital with the complaint of right lower quadrant pain, a gestational sac with a crl of 6 mm (6 weeks 3 days) was observed in the right tuba on ultrasound. It was observed that there was no fetal cardiac activity. Gestational sac was not observed in the uterine cavity. Vaginal examination revealed that Douglas was obliterated, uterine movements were restricted, and the adnexial regions were immobile. In her blood values, beta-hcg was 15,588 mIU/mL and hemoglobin was 13.1 g/dl. When the camera delivered through umbilicus to the abdominal cavity with the laparoscopic method, it was observed that the rectum was densely adhered to cover the entire posterior wall of the uterus, and the sigmoid colon was adhered to cover the left ovary and tuba. The distal part of the appendix and the posterior wall of the abdomen pulled on its side completely were adhered to cover the right adnexial region (picture 1). It was observed that only the uterine fundal part of the female genital system was seen through a 4x3 cm opening. Adhesive areas were opened step by step with blunt dissection due to the proximity of intestinal tissues and impaired anatomy. In the first plan, the intestines were dissected and the ovarian tissue and tubal anatomy were reconstructed (picture 2-3). It was observed that the ectopic focus was at the isthmus level of the tuba and ruptured. Laparoscopic right

salpingectomy was performed. Adhesiolysis foci with leaky bleeding on the uterus were coagulated with bipolar energy. A 22F silicone drain was placed in Douglas. Subsequently, the endometrial cavity was emptied by suction curettage and the case was terminated. The operation took about 130 minutes.

CONCLUSION: An ectopic pregnancy is an emergency that can cause serious blood loss when it ruptures. It may be necessary to perform rapid surgery. For these reasons, we think that in cases of intra-abdominal adhesions caused by endometriosis, it is a more correct approach not to delay the surgery and to perform the operation before the rupture occurs. Since opening the adhesions in the abdomen will prolong the duration of the surgery, an early surgery in a patient without active bleeding will reduce the complication rates and provide a more controlled and comfortable operation for the surgeon.

Keywords: Adhesion, ectopic pregnancy, endometriosis, laparoscopy

Picture 1



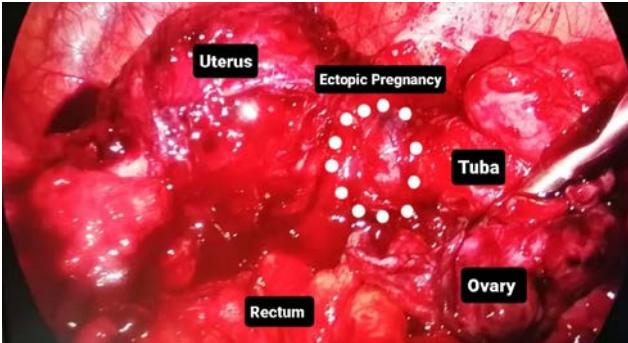
Intraabdominal adhesions

Picture 2



After blunt dissection

Picture 3



Ectopic focus

EP-030 [Jinekoloji Genel]

The severity of inflammation and anti-endometrial antibodies in women with genital endometriosis

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Background. Immune homeostasis disorders during genital endometriosis have particular importance and various studies prove that immune balance disorder leads to the development of endometriosis. The aim of present study was to determine the correlation between the severities of autoimmune and inflammation processes. **Material and methods.** 100 reproductive aged women with genital endometriosis were included in study. All patients were divided into three main groups: 1st group – patients with peritoneal endometriosis, n = 53; 2nd group – patients with extraperitoneal endometriosis, n = 31; 3rd group – patients with a combined form of genital endometriosis, n = 16. Control group was consisted of 30 healthy fertile women without endometriosis. It was studied the levels of TNF- α and IL-6 as anti-inflammatory cytokines and antiendometrial antibodies (AEA) in patients with genital endometriosis. Correlations between anti-inflammatory cytokines and AEA was determined by the Spearman correlation coefficient. **Results.** It was determined statistically significant and positive correlative relations in all research groups. **Conclusion.** The synthesis of autoimmune antibodies is increased during inflammation, which complicates the pathologic process.

Keywords: endometriosis, infertility, reproduction

EP-031 [Jinekoloji Genel]

Postoperative Small Intestine Evisceration Series and Literature Review

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Introduction: Dehiscence at the wound site following laparotomy is a complication that may occur with a frequency of 2-5.5% (1). Evisceration of subsequent organs is a much more serious condition and can lead to organ loss, especially if it is not diagnosed early and managed well. Its mortality can reach up to 20%. Dehiscence usually occurs between the 6th and 12th days postoperatively (2). Generally, the risk factors associated with surgery are related to the incision type and closure technique (3). The incidence of transvaginal evisceration after hysterectomy has been reported as 0.28% (4). The most common risk factors are; These are being over 65 years old, history of malignancy, increased intra-abdominal pressure, wound infection, hypoalbuminemia and anemia (5). We will present the characteristics of cases with evisceration after 4 operations in our clinic.

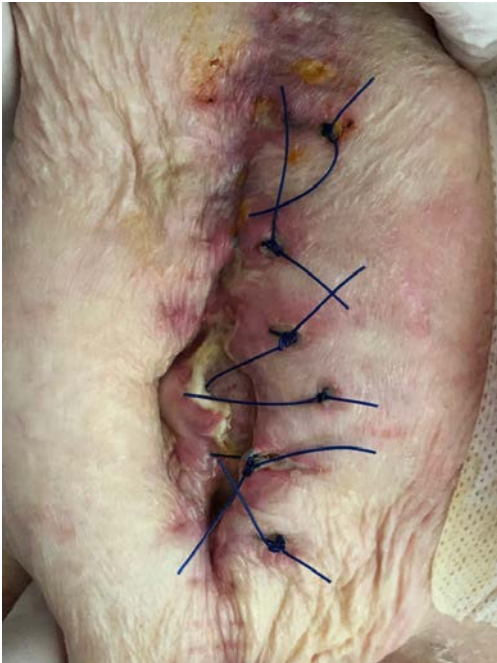
Cases: Between 2020-2021, postoperative small bowel evisceration

occurred in 4 of our patients. Demographic data of the patients are shown in Table 1. Case 1 was small bowel evisceration, in which laparoscopic hysterectomy was performed due to persistent cervical dysplasia and cuff dehiscence occurred after coitus in the second postoperative month. Case 2, skin repair was performed by leaving the fascia open in the patient who underwent debulking surgery for ovarian cancer and underwent emergency re-laparotomy with small bowel perforation on the second postoperative day. Skin dehiscence and small bowel evisceration occurred 1 month postoperatively. Cases 3 and 4 are patients who were operated for ovarian and endometrial malignancies and who underwent re-laparotomy for small bowel evisceration on the 11th and 9th postoperative days. As a remarkable feature, hypoalbuminemia and anemia, which are risk factors, were present in 2 patients. During the re-laparotomy of the patients, primary fascia repair was performed in cases 3 and 4. Mesh is not used. In Case 1, primary repair was performed by laparotomy, excision of the cuff margins, and suturing again. Case 2, on the other hand, was left to secondary healing by performing skin repair.

Discussion: Factors contributing to vaginal apex weakness after surgery include poor surgical technique, postoperative cuff hematoma or infection, continued sexual activity before full recovery, advanced age, chronic steroid therapy, malnutrition, and any medical condition that impairs wound healing, such as poorly controlled diabetes. (6). Similar factors apply to abdominal evisceration. Considering our cases, we see that there are hypoalbuminemia, anemia, early coitus, history of malignancy and wound infections. Early recognition of this rare complication seen after gynecological operations is very important to provide appropriate treatment and prevent further morbidity. At the same time, it is extremely important to take steps to correct the risk factors, such as replacing the hypoalbuminemia of the patient in the preoperative period, and providing appropriate blood and blood product transfusions for anemia.

Keywords: Evisceration, Small Intestine, Postoperative

Case 2



Demographic Data

	Case 1	Case 2	Case 3	Case 4
Age	53	56	59	88
Incision	Laparoscopy	Median Laparotomy	Median Laparotomy	Median Laparotomy
Hemoglobin Postop.2.Day	10,9 g/dL	7,5 g/dL	11,6 g/dL	9,1 g/dL
Albumin Postop.2.Day	35 g/L	23 g/L	33 g/L	23 g/L
Wound Infection	-	+	-	+
Evisceration Day	60 Day	36 Day	11 Day	9 Day
Ascite	-	-	-	-
Embolism	-	-	-	+
Diabetes Mellitus (DM)	-	+	-	+
Hypertension	-	+	-	+
Steroid Use	-	+	-	-
Perop Blood Transfusion	-	-	-	+
Malignancy	-	+	+	+
Risk Factors	Koitus	Steroid Use Anemia DM Wound Infection Hipoalbuminemia Malignancy	Malignancy	Older age Anemia DM Wound Infection Hipoalbuminemia Malignancy

EP-032 [Jinekoloji Genel]

An unusual endication of hysterectomy - penetrating trauma

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BACKGROUND: Without pelvic fractures iliac vessel injuries rarely lead to hysterectomy. In our case, patient attempted suicide by jumping from high and she fell on the railing. Iron bar damaged istmic part of uterus and iliac vessels. This type of injury is quite rare but iliac vessel injury should be kept in mind; hysterectomy may be required in such cases.

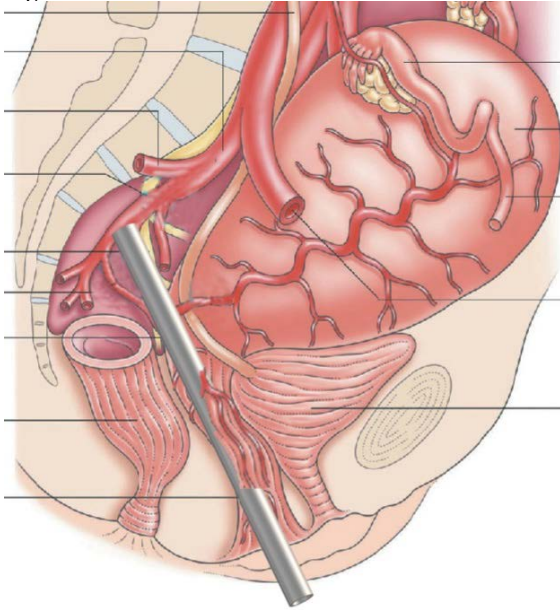
Case presentation: A 51 year-old female patient presented at the emergency room after falling from high (1st floor balcony) and associated servico-vaginal penetrating trauma of railing. Her son took her to emergency room with car. The patient was lucid and her general condition was rated as average. Her blood pressure was 80/50mmhg, pulse 112/min. GKS was 14. Brain CT showed left temporoparietal hipodens areas. According to information from his son she had delusions for the past 3 years. Neurologist said that lesion can be compatible with schizophrenia. On physical examination she hadn't got any apparent fracture. She had vaginal bleeding, vaginal examination couldn't be done optimally because of patient's agitation, there was a 3-4 cm non-bleeding laceration on posterior vaginal wall. At pelvic radiography there wasn't any pelvic fracture. Following abdominal CT showed pelvic hematoma. Then she underwent an emergency surgery by gynecology and general surgery team. Her preoperative hemoglobin level was 11.2, INR: 0.9. During surgery, beside exclusion of upper abdominal bleeding any other abdominal organ injury, 2 cm laceration seen at right side of isthmus and cervix. After hysterectomy and bilateral salpingo-oophorectomy when entering the retroperitoneal area bleeding observed from right internal iliac artery and venous plexus. For iliac vessels injury cardiovascular

surgeon included to surgery. Internal iliac artery was ligated with sutures and hemostasis was provided by clipping venous plexus. Bilateral ureters visualized, peristaltic movements observed. Drainage catater placed to Douglas pouch, 4 spongostan and 3 surgical placed to leaky bleeding areas than after bleeding control operation completed. Intraoperative blood gas hemoglobin was 6.5, patient had 3 unit erythrocyte and 2 unit fresh frozen plasma transfusion intraoperatively. Postoperatively patient was transferred to cardiovascular intensive care unit, extubated at second day. Piperacillin and tazobactam antibioteraphy started and she was vaccinated against tetanus. Totally she had 7 unit erythrocyte, 4 unit fresh frozen plasma, 2 gr transamin, 3 gr fibrinogen replacement. At postoperative 9th day she accepted to gynecology service. Postoperative 19th day she discharged with recovery.

CONCLUSION: Penetrating trauma to iliac vessels carries a high mortality. Delay in surgery can result in a high mortality. A high index of suspicion and prompt aggressive surgery are necessary to improve changes of survival of patients with this highly lethal injury.

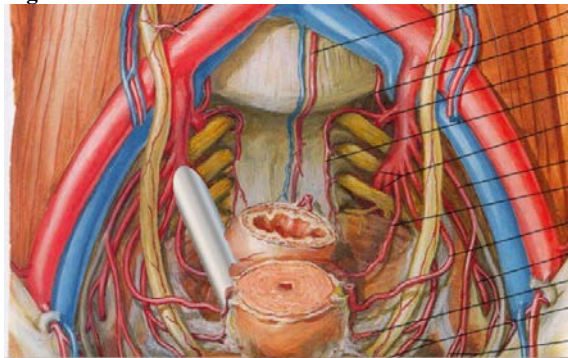
Keywords: emergency hysterectomy, penetrating trauma, iliac vessel injury

Figure 1



Iron bar penetrated through posterior vagen, entered the cervix at 10 o'clock and damaged iliac vessels.

Figure 2



Iron bar penetrated medial to ureter, did not damage it

EP-033 [Jinekoloji Genel]

A giant adnexial mass at cesarean section

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Backgorund: Our study the outcome of incidental adnexial mass detected during cesarean section. Clinical orientation of adnexial masses in pregnancy and to report a case

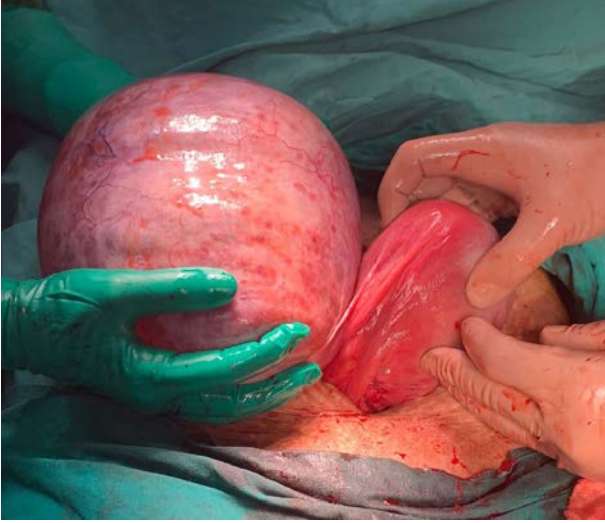
Case presentation: A 23 years-old pregnant woman presented to emergency room due to new onset of abdominal pain. Her general condition was rated as good, vital signs were stabile. She was at 38th week of pregnancy, Gravida:2, Parity:1, Abort:0, Living:1. She was not referred to hospital or any other health institution during pregnancy before. She had no known disease, drug allergy or medication. She had no history of smoking and alcohol. Her only operation was cesarean section. On ultrasound examination; fetal biophysics profile was good, fetal measurements were compatible with 38 week, fetus was vertex presentation and plasenta was located at anterior wall, homogenous. At right side, there was multilobuler, hypoeogenous huge cystic mass approximately 30 cm in diameter. There were not any pelvic free fluid. In the vaginal examination; there was no bleeding or amniotic fluid discharge and no servical dilation. Regular uterin contractions were observed on NST and she underwent emergency cesarean section with midline incision. Birth weight was 3200 gr, and APGAR score was 9-10. A cystic mass of about 30 cm diameter originating from right ovary was observed in the pelvis. Cyst had regular contures and was fluctuating (Photo). No pathological findings were detected in the peritoneum, omentum or other intraabdominal organs. Unilateral salpingo-ooferectomy was performed and the specimen was sent to pathological examination. Cyst weighted 3440gr. At postoperatively first day her the routine covid-pcr test was positive and the proper treatment was started in our hospital. She had no other complications. At postoperative fourth day she was discharged with recovery. Pathological result was luteal cyst.

DISCUSSION: Adnexial masses occur %1 of pregnant women and they are usually asymptomatic. These generally originates from ovaries. Functional ovarian cysts (follicular, corpus luteum and theca lutein cysts), cystic teratomas, serous cystadenomas, para-ovarian cysts, mucinous cystadenomas, endometriomas and malignant tumors can be seen. Functional ovarian cysts are usually detected in the first trimester of pregnancy and almost always regress spontaneously. Persistent adnexal masses that emerge after 16th gestational week may be neoplastic, and surgical exploration may be required in these cases. Two of these are pregnancy specific and should be evaluated carefully. They are luteoma of pregnancy and theca-lutein cysts. These regress after delivery and if any complication develops, proper intervention should be made. If the abdominal mass is unilateral, unilocular, mobile and less than 6 cm the recommended approach is follow-up. If the abdominal mass is larger than 6 cm, solid and bilateral or persists in the second trimester, laparotomy should be performed.

CONCLUSION: Adnexial masses incidentally encountered during third trimester or cesarean section should be excised due to their possibility of malignancy and to avoid additional surgical procedures.

Keywords: incidental adnexial mass, pregnancy, management, giant mass

Giant (30 cm * 25 cm) right adnexial mass at cesarean section



The weight of the mass was 3440 gram



EP-034 [Jinekoloji Genel]

Negative predictive value of PAP smear in patients with acidity-white patterns on colposcopy

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Introduction/Background*

In our daily practice we use cervical cytology and colposcopy as a routine screening method for cervical dysplasia and cervical cancer. HVP screening is not cover by insurance and large number of poorly

complaint patients limited our resources and we warrant cervical biopsy in patients with acidity-white on colposcopy examination regardless of the Pap smear results.

Methodology: This was retrospective study evaluating 403 patients with acidity-white abnormality on colposcopy who underwent cervical biopsy between January 2015 till January 2022 in General hospital Lazarevac, Obgyn department.

We correlated results of conventional cervical cytology with results of biopsy to calculate predictive value of cervical cytology in excluding the diagnosis as cervical dysplasia and cervical cancer.

Results: Biopsy results showed 89 patients with LGSIL, 38 with HGSIL, and 1 with invasive carcinoma of cervix. Normal finding on biopsy had 275 patients.

Normal Pap smear had 345 patients and 58 patients had some of cervical abnormality. Negative predictive value (NPV) of Pap smear for excluding severity dysplasia and cervical cancer was 96,39%. NPV for excluding any type of dysplasia in patients with acidity-white was 72,86%. Positive predictive value (PPV) of abnormal cytology was 89,79% for discover abnormal findings on cervical biopsy.

Conclusion: Pap smear is useful tool to guide necessity for cervical biopsy in patients with acidity-white pattern on colposcopy. High negative predictive value in our study show us that cervical biopsy can be avoided in patients with acidity-white patterns and normal Pap smear.

Keywords: acidity-white, colposcopy, Pap smear

EP-035 [Jinekoloji Genel]

Three times recurrent ovarian mature cystic teratoma; a case report

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Aim: The most frequent benign ovarian tumor in young and middle-aged women is mature cystic teratoma. It is responsible for 20 to 50% of adult and pediatric ovarian tumors. Recurrent ovarian mature cystic teratomas constitute a very unusual condition. Herein, we report a mature cystic teratoma case that presented with three recurrences following operation.

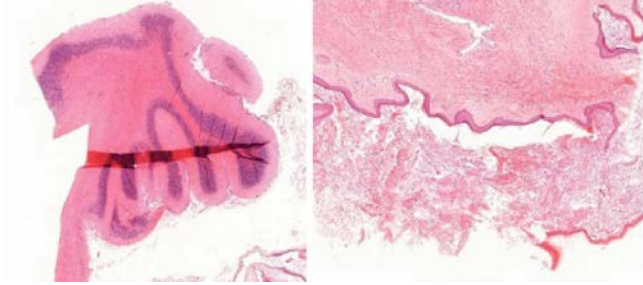
Case Report: A 35-year-old G0P0 woman was admitted to our hospital with right adnexal pain. The diagnostic work-up revealed a mobile 7x6 cm cystic-solid complex right ovarian mass and a 3x3 cm left ovarian hyperchogenic complex mass. One year after laparoscopic removal of bilateral mature cystic teratomas, she was diagnosed and operated for a 5 cm right ovarian mature cystic teratoma (Figure 1). She presented with two more recurrent mature cystic teratomas on the left ovary two and five years after the second surgery, which were managed by laparoscopy and laparotomy, respectively. Mature cystic teratoma was determined on all histopathologic examinations. A three-year follow-up examination detected no sign of recurrence.

Conclusion: Recurrence of mature cystic teratoma after surgical removal is a very rare condition. There is no consequential difference in the

recurrence rate between patients formerly performed with laparotomy and laparoscopy. Inadequate enucleation during primary surgery and even rupture of the mature cystic teratoma may cause relapse to mature cystic teratomas. Undetected and very small mature cystic teratomas that may be challenging to detect during surgical exploration may lead to recurrence. The present case demonstrates that although very rare, mature cystic teratomas may show recurrence three times. Any pelvic mass following removal of mature cystic teratoma should be evaluated as a potential recurrence, particularly following laparoscopic removal.

Keywords: Mature cystic teratoma, Dermoid cyst, Surgery

Fig.1



a. Mature glial tissue resembling cerebellar parenchyma (H.E.x30) and b. cyst lined by squamous epithelium with luminal keratin, H.E.x30

EP-036 [Jinekoloji Genel]

Rectus abdominis muscle endometriosis; a novel form of abdominal wall endometriosis

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OBJECTIVE: Abdominal wall is a rare site for extra-pelvic endometriosis, development of which is usually associated with previous surgical incision scars. It is a rare form of endometriosis, with the reported incidence of 0.45%. Intramuscular endometriosis is even rarer with a couple dozen reported cases. The triad of Abdominal Wall Endometriosis (AWE) is, cyclical pain, history of previous abdominal surgery and mass in the abdominal wall or nodule at incision scar. For the differential diagnosis of abdominal swellings, abdominal wall endometriosis should be considered. Rectus abdominis muscle is an even rarer location for extra-pelvic endometriosis. Our objective is sharing our experience with a rectus abdominis endometriosis case from diagnosis to surgery and follow-up.

METHODS: Our patient had cyclical pain and an abdominal swelling just above her cesarean scar. She had no other previous abdominal surgeries apart from a previous cesarean delivery. With subsequent imaging and tests the patient had been scheduled for operation with the preliminary diagnosis of rectus abdominis muscle endometriosis.

RESULTS: Our patient applied to our out-patient clinic with cyclical pain and an abdominal swelling which grew in size with menses just above her cesarean scar. She is 31 years old, gravidity 1 parity 1, her only previous surgery is cesarean delivery, she has Hashimoto's Thyroiditis and asthma as chronic co-morbidities. On her physical examination

she indeed had a swelling approximately 3 centimeters above the left side of the incision. The swelling was around 2 centimeters in size. Her gynecologic examination results were insignificant, with no other endometriotic cysts. Our patient underwent a tissue sonography which was reported as following, "a heterogenous, hypoechoic, mass lesion that's approximately 20x14x15 centimeters with irregular boundaries inside the rectus abdominis muscle is observed. The lesion is supplied from a slim arterial structure that is derived from the inferior epigastric artery. The sonographic findings are coherent with the suspected endometriotic lesion, histopathologic confirmation is recommended." After preoperative preparations patient had been admitted for surgery. The lesion was excised under anesthesia, and sent to pathology for confirmation. The pathology was reported as endometriosis, confirming our preliminary diagnosis.

CONCLUSION: Our opinion is, in accordance with our experience, patients with a history of previous uterine surgery, we should keep abdominal wall endometriosis in mind. These painful mass lesions should be excised for a more curative treatment, unlike lipomas and other forms of mass lesions that are usually followed in out-patient clinics.

Keywords: abdominal mass, abdominal wall, cesarean scar, cyclical pain, endometriosis, laparoscopy

Image-1



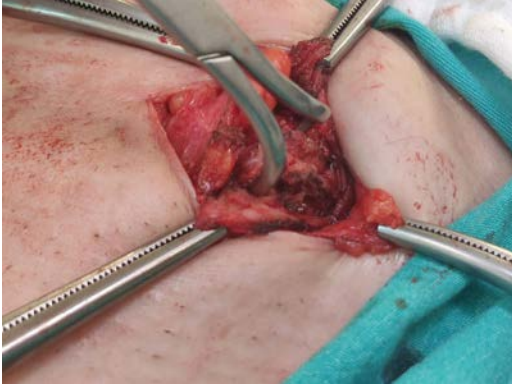
Ultrasound image

Image 2



Lesion on Preop Examination

Image-3



Lesion, intraop image

Image-4



Excised lesion

Image-5



Incision after Excision

EP-037 [Jinekoloji Genel]

Torsion and the rupture of the endometrioma on the basis of chronic abscess in a virgin woman

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Endometriosis is a common disease seen in approximately 7% of women in the reproductive period. The most common location is the ovaries and those cystic formations in the ovaries are called endometriomas. These cysts can rupture at any time of the reproductive period. Chocolate-like fluid spreading into the abdomen after rupture causes chemical peritonitis and causes varying degrees of acute pelvic or abdominal pain.

In this context, we aimed to share our diagnosis, differential diagnosis and treatment approach in a case of tubo-ovarian abscess secondary to ruptured endometrioma in virgo patient who came to our clinic. A 59-year-old patient applied to our clinic with the complaint of severe abdominal and groin pain. Patient stated that she had never had sexual intercourse and did not use alcohol or cigarettes.

In the abdominal examination, bilateral defense and rebound were positive in lower abdominal region. Since patient was virgin, she was evaluated by pelvic examination. In pelvic ultrasonography; While the uterus and right ovary were observed to be of normal size and appearance, a cystic structure, which may belong to an endometrioma was observed. It was 60x65 mm in size, with irregular borders, heterogeneous image and minimal fluid collection located in the right paraovarian and douglasarea were observed. In addition, kissing ovary images in bilateral ovaries were remarkable in MRI report of the patient (Secondary to findings of Pelvic Inflammatory Disease). Laboratory tests revealed Leukocyte as 1500/mm³, Neutrophil ratio as 78%, Neutrophil absolute count as 10150/mm³. In addition, CRP level was normal. Patient was hospitalized with the preliminary diagnosis of endometrioma cyst rupture and Tuboovarian abscess and IV fluid replacement and antibiotic treatment were started. It was learned that patient was using coumadin due to a previous mitral valve operation. Patient, whose vitals were stable, was treated with antibiotics so time can be gained for having preoperative INR value as <2. Despite Tuboovarian abscess treatment, patient's pain did not subside, and therefore laparotomy was performed at 50th hours after the hospitalization. Extensive coagulated hemorrhagic fluid was observed in the abdomen during the operation. Torsion and the rupture of the endometrioma was observed on the basis of chronic abscess in the left ovary. The cyst wall in the left ovary was held with ovarian clamps and peeled off. Left salpingo-oophorectomy was performed.

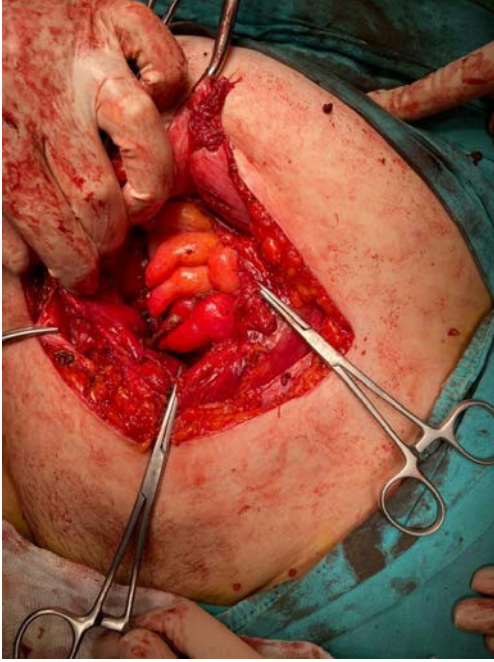
Patient's complaints improved after operation, antibiotic therapy was continued, and patient was discharged on the 4th postoperative day. Patient's pathology result revealed active infection associated with endometrioma cyst.

Tubo-ovarian abscess is a common complication in women with pelvic inflammatory disease. However, it is rarely seen in virgo women. Women with endometriosis or endometrioma cysts are more prone to develop intra-abdominal infection and tuboovarian abscess. In addition, abscess

development is a serious and severe complication of endometrioma cyst. Tuboovarian abscess should definitely not be forgotten in the differential diagnosis of acute abdomen in Virgo women. Since the risk of septic shock and mortality increases in such cases, they should be quickly diagnosed and hospitalized, IV antibiotic therapy should be started, and surgical drainage should be performed without losing time for definitive treatment.

Keywords: chronic abscess, endometrioma, rupture, torsion, virgo

endometriomal base



Tubo-ovarian abscess



EP-038 [Jinekoloji Genel]

Diffuse morular type squamous metaplasia

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Objectives: The objective of the study is to provide a general perspective on patients who applied to the obstetrics and gynecology outpatient clinic with the complaint of abnormal uterine bleeding and whose endometrial biopsy resulted as morular type squamous metaplasia through a case report, and to be careful in the follow-up by reminding that this rare endometrial pathology may progress to malignancy.

Materials and Method: We used a case report and pathological samples of endometrium tissue for our study.

Case: Our 28-year-old patient with a history of polycystic ovarian syndrome and oral contraceptive use was admitted to our clinic with the complaint of prolonged menstrual bleeding.

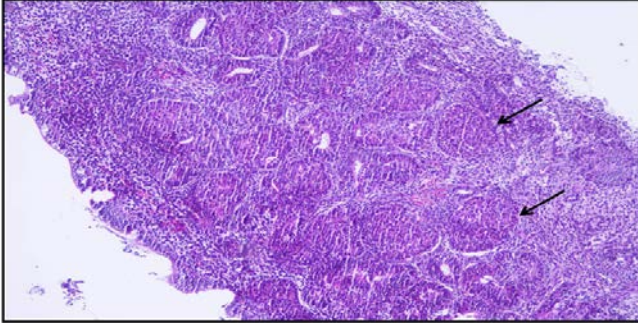
In the ultrasonographic evaluation, the endometrium was 13 mm thick and had an irregular appearance. The patient underwent curettage for diagnostic and therapeutic purposes. Pathology was reported as: endometrial polyp fragments containing hyperplastic gland structures, endometrial hyperplasia without atypia in isolated endometrial tissue samples. Although an intrauterine device (mirena) containing levonorgestrel was recommended, the patient preferred medroxyprogesterone acetate medical treatment.

The patient, who used the treatment for 1 month, was reported as polypoid endometrial tissue with diffuse morular type squamous metaplastic changes in the 6th month control endometrial sampling, and the patient was followed up with a mirena. It was reported as the endometrium with decidual changes in the sampling performed without removing the mirena at the 3rd month. The patient was followed up clinically and pathologically with mirena in amenorrhoeic state.

Results: Although morular metaplasia is a benign pathology, it often accompanies hyperplasia. Even without atypia, the accompanying hyperplasia may progress to well-differentiated adenocarcinoma. Although squamous metaplasia is benign and reactive, it is considered a morular type precancerous lesion seen in endometrial sampling. Morular metaplasia, which can develop on the background of endometrial hyperplasia, as in our case, has a higher risk of malignancy.

Due to the possibility of malignancy, patients diagnosed with morular type squamous metaplasia as a result of endometrial sampling should be followed regularly and closely.

Keywords: squamous metaplasia, morula, endometrial hyperplasia

Morular type squamous metaplasia

Morular type squamous metaplasia (arrows) observed in the gland epithelium in the endometrial curettage material (Hematoxylin&Eosin, X10)

EP-039 [Jinekoloji Genel]**Evaluation of Tuboovarian Pathologies in Patients with Vaginal Hysterectomy**

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INTRODUCTION: Vaginal hysterectomy is the first choice among hysterectomy methods, unless there is an anatomical obstacle. Low cost and quick return to daily life are its biggest advantages. Bilateral salpingo-oophorectomy is not preferred in vaginal hysterectomy cases due to possible complications and bleeding risk. Our aim is to examine the feasibility of simultaneous salpingo-oophorectomy in patients who have undergone vaginal hysterectomy and to evaluate the patients who have undergone vaginal hysterectomy.

MATERIALS-METHODS: Between January 2012 and January 2022, 138 patients who underwent vaginal hysterectomy at the Buca Seyfi Demirsoy Training and Research Hospital Gynecology and Obstetrics Clinic were retrospectively reviewed. We identified 23 patients who underwent salpingo-oophorectomy. Surgery notes and pathology reports of 23 patients were analyzed.

RESULTS: Intraoperative salpingo-oophorectomy was performed in 23 (16.6%) of 138 patients who underwent vaginal hysterectomy over a 10-year period. Ovarian pathologies were observed in preoperative ultrasonographic imaging in 7 of these patients. Salpingo-oophorectomy was performed prophylactically in 16 patients. During the salpingo-oophorectomy procedure, salpingo-oophorectomy was performed by holding it with clamps, ligasure was not used. The clinical data of these patients are given in table 1 and histopathological data in table 2.

DISCUSSION: Simultaneous salpingo-oophorectomy during the hysterectomy procedure eliminates the risk of ovarian cancer, reduces the risk of breast cancer, and prevents the patient from undergoing surgery for an ovarian pathology again. Since vaginal hysterectomy is performed in a narrow area, difficulties may be experienced in reaching the infundibulopelvic ligament, and salpingo-oophorectomy is not preferred due to the possible bleeding risk. When the current meta-analyses are evaluated, the possibility of manipulation increases by placing the patient in the appropriate position during the surgery and performing the bowel retraction well. In this way, simultaneous salpingo-oophorectomy can be performed in 60-65% of patients. Patients should be informed about the advantages of salpingo-oophorectomy in the

preoperative period.

Keywords: Tuboovarian, pathology, vaginal, hysterectomy

Clinical data

Patient characteristics	n:23
Age	57.3 (45-70)
Menopause, n (%)	18 (%78.2)
Parity	2.95 (1-6)
Prior abdominal surgery, n (%)	3 (%13)
Peroperative complication (%)	1 (%4)
Postoperative complication (%)	0
Surgery time (mn)	153 (92-220)
Peroperative blood loss (mL)	463 (300-750)

Histopathological data

Pathology Result	
Normal	11 (%47.9)
Paratubal cyst	5 (%22)
Functional cyst	4 (%17.4)
Dermoid cyst	2 (%8.7)
Borderline ovarian tumor	1 (%4)
Malign ovarian tumor	0

EP-041 [Jinekoloji Genel]**Clinical evaluation of patients with candida detected as a result of pap-smear test**

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Zonguldak Bülent Ecevit Üniversitesi, Kadın Hastalıkları ve Doğum
Anabilim Dalı

OBJECTIVE: Candida is a microorganism found in the vaginal flora and can also cause vaginal candidiasis. 75% of women experience at least 1 episode of vulvovaginal candidiasis in their lifetime. The use of antibiotics, pregnancy and diabetes trigger the emergence of clinical signs associated with vulvovaginal candidiasis. The most common symptoms are itching, burning, dryness in the vagina, dysuria, painful intercourse, classically milk curd, or watery white vaginal discharge. The Pap smear test is a simple, reliable, and non-invasive test used to detect precancerous changes in the cervix. In addition to information about preinvasive and invasive changes, additional information such as atrophy and inflammation can be obtained from the pap-smear test. In our study, it was aimed to evaluate the complaints and examination findings of patients with candida detected as a result of pap-smear test.

METHOD: Patients who applied to Zonguldak Obstetrics and Gynecology Hospital between July 2017 and March 2019 for various gynecological complaints or general control, had the pap-smear test and were found to have candida were included in our study. The patients' complaints and examination findings related to vaginal candidiasis were obtained by scanning the patient files.

RESULTS: There were a total of 99 patients who met the specified criteria. The mean age of the patients was 49.9 years, the patients were between 25-84 years old. While 74.7% of the patients (74 patients) had no complaints related to vaginal candidiasis, 7 patients had discharge, 6 patients had itching, 3 patients had vaginal burning, 9 patients had dysuria, and 2 patients had vaginal dryness. While 80.8% of the patients

(80 patients) had no examination findings related to vaginal candidiasis, discharge was found in 11 patients, atrophy in 8 patients, and skin findings in 1 patient.

CONCLUSION: No complaints or examination findings related to vaginal candidiasis were found at a high rate in patients with candida detected as a result of the pap-smear test. Routine treatment should not be started for these patients. If there are no complaints and examination findings related to vaginal candidiasis, antibiotics should not be used to prevent the development of antibiotic resistance and increase costs.

Keywords: Candida, Candidiasis, Vaginal Smears, Pap Smear

EP-042 [Jinekoloji Genel]

The Comparison For The Use Of Copper Intrauterine Device At Our Clinic Prior To And During The Pandemic

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Dr.Sami Ulus Kadın Doğum, Çocuk Sağlığı Ve Hastalıkları Eğitim Ve Araştırma Hastanesi

Contraceptive counselling should include brief discussion of all methods of contraception including the risks, benefits (contraceptive and non-contraceptive), and side effects of the various options with the patient as the variables that impact contraceptive choice differ among women and may change for an individual over her reproductive life.

The copper intrauterine device (IUD) is the most commonly used method of long- acting reversible contraceptive method because of its high efficacy and safety, ease of use, and low cost. It provides a nonsurgical option for pregnancy prevention.

Women who desire and are eligible for an IUD should decide based on preference for cyclic bleeding, lighter periods, or amenorrhea and her tolerance of unscheduled bleeding. As most women can safely use either IUD, understanding preferences around an IUD that meets the patient's expectations and causes a few side effects. The copper IUD does not contain hormones and may be used by women who want or need to avoid exogenous hormones (ie. history of breast cancer and/or hormonally sensitive conditions). Copper IUD users continue to have cyclic menstrual bleeding and have less unscheduled bleeding or spotting than hormonal contraceptives while fulfilling their desire for longer term contraception for up to 10 years, and can be recommend to those who prefer to continue their pre-IUD bleeding pattern as it does not cause anovulation or amenorrhea. It also establishes effective use as an emergency contraceptive method.

At our Clinic at Dr Sami Ulus Women's, Children's Health and Diseases Research and Training Hospital, we compared our data based on outpatient clinic entries for the insertion of the copper IUD from approximately two years prior to and following the onset of the Covid-19 pandemic. Prior to the pandemic, in the last three months of 2018, there were 38 IUD insertions and a total of 271 in the year of 2019. During the first three of months of 2020 prior to the pandemic, 86 IUD insertions were performed with a total of 227 after the pandemic for the rest of the year, 450 insertions in 2021 and 111 in the first three of months of 2022. Although, the data does not support our initial hypothesis that the rate of IUD insertions would decrease due to reduced hospital admission based on the fear of the pandemic and lockdown procedures that also affected

family planning centres, another hypothesis that supports the increased need and awareness of contraceptive methods arises from unknown effects of Covid-19 on not only pregnancies but also on healthy beings. This increase in the interest for contraceptives may have also affected use of other more easily accessible contraception methods like the oral contraceptive, however further studies are needed for accurate assessment.

In summary, despite the ongoing fear of the pandemic, the urgency of modern contraception in the face of the unknown is shown through the increase in the request for IUDs as well as seeking guidance on modern contraception use.

Keywords: COVID-19, Copper, Device, IUD, Intrauterine, Pandemic

EP-043 [Jinekoloji Genel]

Malignant Struma Ovarii in a Postmenopausal Patient with Benign Ovarian Cyst Result from Frozen: Case Report

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Struma ovarii is a rare teratoma in which more than 50% of the tumor tissue is composed of thyroid tissue. Preoperative diagnosis is very difficult. Generally, signs of hyperthyroidism are not observed. Diagnosis and treatment methods are not clearly defined. In this article, a case with histopathologically struma ovarii is presented. A 73 year old, asymptomatic, postmenopausal female patient with an ovarian cyst was considered to be a benign ovarian cyst in the intraoperative frozen examination, and the final pathology was papillary thyroid microcarcinoma developed on the basis of teratoma. The patient was evaluated in the gynecological oncology council, and a treatment and follow up plan was made. The clinical signs and symptoms, diagnosis and treatment options of these rare cases of struma ovarii are discussed.

Keywords: dermoid cyst, postmenopausal cyst, struma ovarii

EP-044 [Jinekoloji Genel]

Laparoscopic ovarian cyst in pregnancy

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object: Adnexal masses are not common in pregnancy. They are often discovered incidentally during routine ultrasound examinations. In general, 24 to 40% of cases are benign tumors; Up to 8% are malignant tumors. Today, laparoscopic surgery is considered the most effective way to manage benign adnexal masses. The advantages it provides to the patient include less postoperative pain, shorter hospital stay, and rapid recovery. Laparoscopy in pregnancy can be performed in any trimester, if indicated. In non-emergency situations, the 2nd trimester is considered the most appropriate time for the operation. In our case, we aimed to talk about the success of laparoscopic treatment in ovarian

cysts during pregnancy.

METHOD: 31-year-old patient has a history of 1 cesarean section. There was a live pregnancy of 13 weeks at the first admission to our hospital. In the left adnexal area, a structure with a size of 95*65 mm, seated in Douglas, with dense contents, suggesting a dermoid cyst in the foreground, was observed. A septated anechoic cystic structure with dimensions of 40*40 mm was observed in the cyst. In the laboratory results, preoperative hemoglobin was seen as 12.5. Laparoscopic left ovarian cystectomy was planned for the patient at the 17th week of pregnancy. A 10 mm trocar was inserted with a vertical umbilical incision, approximately 6 cm above the fundus, with an open technique. Intra-abdominal insufflation pressure was adjusted to 12 mmHg CO₂. Then, a 5 mm trocar was inserted in the right and left lower quadrants under laparoscopic vision. A 5mm third trocar was inserted through the Palmer point. Both ovaries were visualized. There was a cyst of approximately 12 cm in diameter in the left ovary. Ovarian cystectomy was performed. The surgical procedure was terminated. Bleeding control was done, the inside of the abdomen was washed. No additional intra-abdominal pathology was detected.

RESULTS: Postop hemoglobin value was 10.6. After the operation, Her treatment with antibiotics, enoxaparin and progesterone was continued. The patient was in good general condition and was discharged on the 2nd postoperative day.

No pathology was observed in the pregnancy follow-ups of the patient. The patient underwent planned cesarean section at 39 weeks of gestation. The baby was born 3950 grams, 50 cm and had an Apgar score of 9-10.

Conclusion: The incidence of adnexal masses during pregnancy is 2%. Most of these adnexal masses discovered during the first trimester are functional cysts that resolve spontaneously by the second trimester. 80% to 95% of adnexal masses < 6cm in diameter in pregnant patients spontaneously resolve; therefore non-operative management is warranted in such cases. Concerns about the risks associated with emergency surgery suggest elective removal of masses >6 cm in diameter that persist after week 16. It was previously argued that laparoscopy is contraindicated during pregnancy due to concerns about uterine damage from trocar insertion and fetal malperfusion due to pneumoperitoneum. As the number of experienced surgeons increases and successful results are documented, laparoscopy has become the treatment of choice for many surgical diseases in pregnant patients.

Keywords: Laparoscopy, ovarian cyst, pregnancy

EP-045 [Jinekoloji Genel]

A Rare Case of Ectopic Endometriosis: Intramuscular Endometriosis of Rectus Abdominis

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Endometriosis is a disease that results from the presence of functional endometrial tissue anywhere outside the uterine cavity. In the reproductive age, it is most commonly seen in the ovary, sacrouterine ligament, rectovaginal septum and pelvic peritoneum, between the myometrial fibers of the uterus. Endometriosis can be seen around the Pfannenstiel

incision after a previous cesarean section, and around episiotomy after vaginal delivery. The incidence of extragenital endometriosis constitutes approximately 6% of all external endometriosis cases.

A 38-year-old patient who had 2 previous cesarean deliveries was admitted with the complaint of pain in the left side, lower wall of the abdomen that started during the menstrual period. In the physical examination, tenderness was detected in the left lower lateral wall of the abdomen with palpation and no palpable structure was detected. In the abdominal ultrasonography, a 2*2 cm hypoechoic mass was detected in the infero-anterolateral region of the left rectus abdominis muscle. In the lower abdominal pelvic magnetic resonance imaging, a T2W hyperintense lesion was detected in the left lateral rectus muscle bundles, approximately 8 cm above the pubis, measuring 2 x 2 cm, compared to the muscle with millimetric hyperintense areas in the peripheral part. In addition, there was an increase in signal intensity and moderate fusiform thickening in the rectus muscles around the lesion. The described feature was interpreted as endometrioma and associated secondary changes. Excisional biopsy was decided for definitive diagnosis. A 6 cm incision was made on the left lateral side of the old Pfannenstiel incision in the supine position under general anesthesia. A mass of 2 x 2 cm in diameter was reached 3 cm above the Pfannenstiel incision in the left rectus abdominis muscle. The lesion was excised together with the surrounding intact muscle tissue (Picture 1). Excisional biopsy pathology report came as endometriosis. It was observed that the complaint of pain regressed in the 1st month postoperative control. Endometriosis through the Pfannenstiel incision in the abdominal wall accounts for approximately 1% of all patients with external endometriosis. Endometriosis developing in the skin and subcutaneous tissue of the old incision results from iatrogenic implantation of endometrial cells in gynecological surgery (especially in cesarean section surgery). Endometriosis localized to the rectus abdominis muscle is very rare. Although many theories have been proposed about the occurrence of endometriosis, one of the most popular theories for extragenital endometriosis is the theory of vascular spread. According to this theory, endometrial cells reach extragenital areas via blood vessels or lymphatic system, causing endometriotic foci. The development of primary rectus muscle endometriosis can be explained by this theory

Extrapelvic endometriosis should be considered in the differential diagnosis of abdominal wall lesions in women of reproductive age if their complaints are recurrent and related to the menstrual cycle. Abdominal ultrasonography and Contrast Abdominal Magnetic Resonance can be used for diagnosis. If the result is reported as endometriosis or if clinical and laboratory suggestive of ectopic endometriosis, it should be completely excised with a clean surgical margin.

Keywords: endometriosis, scar endometriosis, rectus muscle

picture 1



Surgical macroscopic view of the endometriosis focus removed from the rectus muscle

EP-046 [Jinekoloji Genel]

Catamenial pneumothorax controlled by dienogest, case report

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AIM: Catamenial pneumothorax is a rare but a serious condition for women at reproductive age. In reproductive age; the prevalence of catamenial pneumothorax of all cases of pneumothorax ranges from 7.3% to 36.7%. Usually it is diagnosed at a later age than pelvic endometriosis. In a review, pelvic endometriosis were found only with 55% of patients with catamenial pneumothorax. In 50% of catamenial pneumothorax patients, history of pelvic surgery was found. Diagnosis are made clinically with a history of chest pain, hemoptysis and dyspnea beginning before every menses. Computerized tomography (CT) shows us pneumothorax at usually right side (93%). Diaphragmatic nodules/endometriotic implants are found in 89% of cases in the literature. The mechanism of thoracic endometriosis is not fully understood. A number of theories have been postulated including coelomic metaplasia, lymphatic or hematogenous spread, or retrograde menstruation with subsequent transdiaphragmatic migration of the endometrial cells. Treatment consisted of emergency surgery for acute episodes of pneumothorax. The surgical aspect included removal of blebs and bullae, wedge resection, and pleurodesis (abrasion or talc). The new approach for treatment is was video-assisted thoracoscopic surgery as recurrence rate varied from 14.3% to 55%. GnRh agonists or dienogest therapies are alternative options. In our study, we will discuss the case of catamenial pneumothorax.

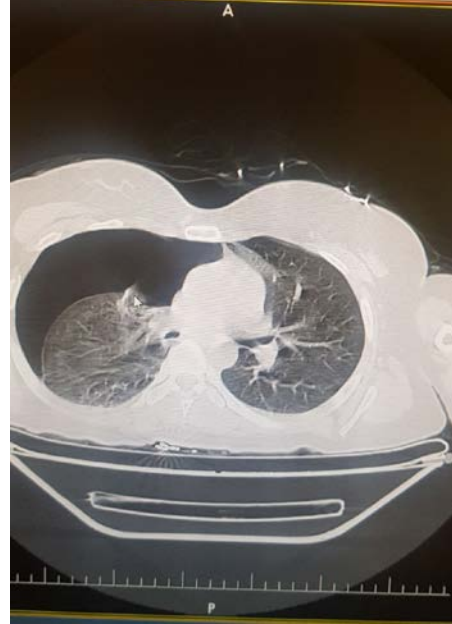
METHOD: A 32 year old woman referred to our gynecology clinic for treatment and evaluation of recurrent catamenial pneumothorax.

RESULTS: At her physical examination and detailed medical history; she told that she had chest pain pneumothorax periods in every menses period. Her pelvic ultrasound was normal for endometriosis evaluation. Despite she was operated for right side pulmonary endometriosis in university hospital two years ago, recurrent attacks caused lungs to appear like hematoma in thorax CT at menses. Although she was operated at right side, left lung was deteriorated by recurrent attacks. Instead of a new surgery, continuous diegonest therapy once a day was given orally for 6 months. During this treatment, patient was amenorrheic and no attack of hemorrhage was seen. Her chest X-ray was normal for both side of lungs.

CONCLUSION: The possible diagnosis of catamenial pneumothorax should always be part of the differential diagnosis in reproductive-age women with menstrual-related chest pain and shortness of breath. These patients usually present with an acute episode and are managed by the pneumologist or thoracic surgeon. We offer consultation of a gynecologist for non-invasive treatment.

Keywords: catamenial pneumothorax, dienogest, endometriosis

Figure 1: Thorax CT of a catamenial pneumothorax attack



Thorax CT of a catamenial pneumothorax attack- on both side- dominated on left side large hematoma are seen

Figure 2: Normal chest X-ray after dienogest therapy



Normal chest x-ray after diegonest treatment

EP-047 [Jinekoloji Genel]

Two intrauterine devices found incidentally during urinary calculus evaluation, case report

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AIM: Intrauterine device(IUD) is the most popular contraception

method after sterilization. 15% of women in the world use it with an effectiveness of 97-99.4% for contraception. Local release of prostaglandins and leucocytes from the endometrium generates the mechanism of contraception. Although it is easy as 'insert and forget', it has some complications as; abortus, ectopic pregnancy, malposition, expulsion and etc. Malpositioned IUD's are usually symptomatic but rarely can be found incidentally. In our case we discussed a 28 year old woman with two malpositioned IUDs diagnosed incidentally during urinary system evaluation.

METHOD: 28 year old woman had a renal colic and referred to urology for evaluation.

RESULTS: During urinary system evaluation her urinary system x-Ray showed two IUDs in the abdomen. She had a history of IUD insertion 6 years ago and got pregnant after this. She thought the IUD had fallen and got pregnant. She had a normal vaginal birth. After this birth she was inserted another IUD but got pregnant again. She did not tell the doctor about the IUD should be taken. She did not come follow-up. A cystoscopy procedure was done and a 3 cm urinary calculus was found nearby the right ureteric orifice. In that neighbourhood an IUD was seen and removed uneventfully. Diagnostic hysteroscopy was done for lost IUD but IUD was not found in the uterine cavity. So diagnostic laparoscopy was done and other lost IUD was found on the posterior side of the uterus beneath the serosa and removed easily and completely.

CONCLUSION: Position of IUD should be determined after insertion and control should be done by ultrasonography. In suspected cases further evaluation are needed. Malposition is a common complication of IUD but in the literature it can be complicated if vascular involvement(internal iliac artery involvement in the literature) occurs. It can be solved with diagnosis of suspicion.

Keywords: cystoscopy, intrauterine device, malposition

Figure 1: Urinary X-ray



Two adjacent intrauterine devices seen

Figure 2: Cystoscopic image



An IUD nearby the right ureteric orifice

EP-048 [Jinekoloji Genel]

Giant Myoma Pressing On The Liver

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Uterine leiomyoma is the most common benign gynecological tumor of the female reproductive system. It is found in approximately 25% of women, with its prevalence increasing in the reproductive age and decreasing after menopause. (1) (2) Sometimes they can reach gigantic dimensions by completely filling the abdominal cavity. Surgery is the best treatment option. In our presentation, we aimed to present the successful surgical treatment of one of the giant uterine leiomyomas pressing on the liver.

Case Report: A 50-year-old multiparous patient was admitted to our clinic with the complaint of right upper quadrant pain. In bimanual vaginal examination, an enlarged uterus, irregular borders, and an irregular mass extending from the pelvis to the lower liver were palpated. In transvaginal and transabdominal ultrasonography, the uterus was approximately 24 weeks in size, deviated to the left, multiple intramural myoma foci with the largest 19 cm, and subserosal 20 cm degenerated myoma originating from the right lateral of the uterus and extending under the liver were detected. As a result of the MRI, a massive mass of 310x250x190mm with calcification areas in the lateral parts, which started from the pelvic region and extended to the inferior part of the liver, causing compression, filling the abdomen was detected. In laboratory examinations, liver function tests were twice as high as normal. Laparotomy was planned for the patient with the preliminary diagnosis of giant myoma uteri. Hysterectomy and bilateral salpingoopherectomy were performed and the operation was completed without complications. Liver function tests regressed to normal limits in the postoperative follow-up. As a result of the pathological examination, a total of 35 hyalinized calcified leiomyomas, the largest of which was 20 cm, were detected.

Discussion: Myoma uteri are benign monoclonal tumors originating from the smooth muscle of the myometrium. Thanks to the large volume of the abdominal cavity, the flexibility of the abdominal walls, and the slow growth rate of fibroids, these tumors can reach gigantic sizes, mostly asymptotically. (3) However, they can cause various symptoms related to tumor size and localization. Pain symptoms such as abnormal uterine bleeding, chronic pelvic pain, dysmenorrhea and dyspareunia and symptoms related to organ compression may develop. (4) In our case, there was a complaint of abdominal distension, right upper quadrant pain and constipation.

The majority of cases are detected during pelvic examination. Ultrasonography is the first-line imaging method that should be preferred in the diagnosis, but the number of myomas, their localization and their relationship with the endometrial cavity are better determined by MRI. (5) In such cases, where the mass originates from is very important for the operation to be planned.

Preoperative complication management and surgical procedures require careful planning. Giant mass size creates changes in pelvic anatomy such as ureter deviation, therefore ureter resection, gastrointestinal perforation etc. Care should be taken when performing laparotomy to prevent complications in adjacent organs.

Conclusion: Patients with giant myoma are special cases that require appropriate preoperative preparation, experienced gynecologist, intraoperative multidisciplinary approach and postoperative close follow-up.

Keywords: Myoma, Liver, Giant, Pressing

Picture 1: Swelling caused by the mass before the operation



Picture 2: Massive mass compressing the liver preoperatively



Figure 3: Postoperative uterus and mass pressing on the liver



EP-049 [Jinekoloji Genel]

The effect of hysterectomy types on postoperative depressionMehmet Can Nacar, Ercan Comert

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OBJECTIVE: Hysterectomy is used worldwide as the ultimate treatment of abnormal uterine bleeding and endometrial cancer. It is one of the most common gynecological operations performed for various reasons. In our study, the Patient Health Questionnaire 9 was applied to the patients who underwent hysterectomy to understand the preoperative and postoperative depression status. The effect of the type of surgery on depression was evaluated.

METHOD: This cross-sectional study was conducted between 01-06-2020 and 01-01-2022, who applied to Adiyaman University Training and Research Hospital. It was performed with patients who were planned to undergo hysterectomy. The data were obtained according to the face-to-face interviews with the patients before the operation and 10 days after the operation, and the pathology results in the postoperative 1st month. The age of the patients, the number of pregnancies and live births, marital status, menopause situation, type of hysterectomy operation and whether there was any malignancy as a result of the pathology were recorded in the sociodemographic information form created. 100 patients who met the inclusion criteria were included in the study.

RESULTS: It was determined that there was a significant difference between the mean HSA-9 scores of the patients according to the type of surgery in the preoperative period ($p=0.010$). No significant difference was found in the comparison of HSA-9 scores according to the types of surgery in the postoperative period ($p=0.768$). There was no statistically significant difference between the mean HSA-9 score (7.39 ± 4.21) of patients with benign diseases in the preoperative period and the scores of patients with malignant diseases (8.14 ± 4.74) ($p=0.496$). In the postoperative period, there was no significant difference between the mean HSA-9 (7.6709 ± 4.48) score of patients with benign diseases and the mean HSA-9 (8.24 ± 4.46) scores of patients with malignant diseases ($p=0.541$). There was no significant difference between the mean preoperative HSA-9 scores (8.38 ± 3.96) of non-menopausal patients and the mean scores of menopausal patients ($7.12 (\pm 4.46)$) ($p=0.168$).

CONCLUSION: In this study, which aims to compare the depression level of women who have undergone hysterectomy operation before and after the operation, the pre- and post-operative evaluation of 100 female patients. In a 2-year prospective observational study at Sohag University Hospital, Egypt, in which 96 women scheduled for hysterectomy were evaluated for pre- and postoperative psychiatric comorbidity using the General Health Questionnaire (GHQ-28), the Beck Depression Inventory, and the Hamilton anxiety scale before and after hysterectomy for benign indications. It was applied to evaluate psychiatric morbidity. According to the study, since female reproductive organs are affected in gynecological operations, mental problems were seen more frequently. In a study published in 2016 investigating the effects of abdominal and laparoscopic hysterectomies on female sexuality and psychological state, and in a national sample cohort study examining the relationships between hysterectomy and depression in South Korea, it was reported that depression, anxiety disorders, insomnia, and psychosomatic disorders increased after hysterectomy. These results show that the indication for hysterectomy should be well established.

Keywords: depression, hysterectomy, PHQ-9 Questionnaire

EP-050 [Jinekoloji Genel]

Relationship between two gynecological pathologies with similar risk factors, Adenomyosis and Ectopic Pregnancy, Tertiary Center ExperiencesRamazan Erda Pay, Ece Özdemir, Sezin Ertürk Aksakal, Yaprak Engin Üstün

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OBJECTIVE: Adenomyosis is a disease that cannot be adequately evaluated in clinical gynecology in terms of symptoms, diagnosis and treatment, since approximately 30% of cases are asymptomatic. The classic clinical manifestations are hypermenorrhoeal bleeding, pelvic pain, and a gradually growing tender uterus, especially in multiparous perimenopausal women. The diagnosis can be made pathologically. Although the exact figures regarding the frequency of adenomyosis are not known, its prevalence is reported to be between 8.8 and 61.5% in various studies. The frequency of hysterectomy materials performed for benign gynecological reasons was found to be 20-35%. Although medical treatment options for symptoms may be preferred in the treatment, the main treatment is hysterectomy. Implantation in the adenomyosis focus may result in a pregnancy developing within the myometrium. Therefore, it has been hypothesized that women with adenomyosis are more likely to have a history of ectopic pregnancy, as adenomyosis may be a risk factor for the development of intramural ectopic pregnancy. In our study, we aimed to examine the coexistence of adenomyosis and ectopic pregnancy in the data of our clinic.

METHOD: The data of patients who underwent hysterectomy for benign gynecological reasons in Etlik Zübeyde Hanım Training and Research Hospital between 2011 and 2018 were retrospectively analyzed. Demographic and clinical data of the included patients were recorded.

RESULTS: In the pathology report of 142 (20.02%) of 709 patients who underwent hysterectomy for benign gynecological reasons between 2011 and 2018 and whose data were fully accessed, 22 patients (15.5%) had only adenomyosis in 120 patients (84.5%). on the other hand, he was followed up as adenomyosis and co-diagnosed. Of 142 patients, 20 were Laparoscopic and 122 were Laparotomic. (Table 1) Two of the 142 patients (1.4%) had a history of ectopic pregnancy and related surgery in their past medical history. (Table2)

CONCLUSION: Since adenomyosis and ectopic pregnancy are common risk factors, their associations have been investigated by some researchers. In one of the few incidence studies, it was found that only 10.5% in patients with adenomyosis pathology and 1.8% in those with additional diagnosis, similar to our study. It should be kept in mind that deep adenomyosis is rarely a risk factor for intramural ectopic pregnancy. We think that our study should be supported by more multicenter and more patient studies.

Keywords: Adenomyosis, Ectopic Pregnancy, Laparoscopy, Laparotomy

Table 1. Demographic data of the patients included in the study

	Patients with Adenomyosis Diagnosed with Hysterectomy (n=142)
Age (years) (mean, std dv)	47,78 ±6,98
Gravida (mean, min - max)	3,13 (0-9)
Parity (mean, min - max)	3,05 (0-9)
Delivery Type history (%)	
Vaginal	102 (%71,7)
cesarean section	14 (%9,9)
Vaginal & cesarean section	26 (%18,4)
Hysterectomy Type (%)	
Laparoscopy	20 (%14,1)
Laparotomy	122 (%85,9)
Vaginal	-

Table 2. Data of patients with a history of Ectopic Pregnancy

Patient	Age	Gravida	Parity	Pregnancy Type	Delivery Type	Symptom	Surgery Type	Pathology Result
1	47	1	0	Spontan	-	menorrhagia	TAH USO	Adenomyosis
2	44	4	3	Spontan	Vaginal	menorrhagia	TAH BS	Adenomyosis + Fibroid

EP-051 [Jinekoloji Genel]

Two rare types of adnexal torsion

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Şehir Hastanesi Kadın Hastalıkları ve Doğum Anabilim Dalı

Adnexal torsion is a rare cause of acute abdominal pain. It is a gynecological emergency that presents with pain and requires early diagnosis to prevent the permanent infarction of the ovaries. Ovarian torsion refers to rotation of the connective tissues of the ovary and usually leads to partial or complete obstruction of blood flow. Adnexal torsion can be seen in women of all ages. Usually, the fallopian tube is often torsioned together with the ovary. Isolated torsion of the fallopian tube is less common, and may be related with hydrosalpinx, tubal or paratubal cysts.

CASE 1: A 32-year-old nulligravid patient was admitted to our emergency department with abdominal pain lasting for one day. On physical examination, there was a defense in right lower abdominal quadrant. Her bimanual pelvic examination was normal except for a moderate cervical tenderness. In ultrasonographic examination, uterus was in an antevert position, endometrium was observed as regular and a 13x9 cm heterogeneous mass was observed possibly originating from the right ovary. We performed an emergent laparoscopy and identified three rounds of torsion in the right ovary [Fig. 1,2]. We detected cysts resembling endometrioma in both ovaries with a size of approximately 12 cm in right ovary, and in 4 cm in left ovary. We detorsioned the right ovary, aspirated its content and excised the cyst wall [Fig. 3]. The content of left ovary was aspirated, as well. The patient was uneventfully discharged on the second postoperative day. Pathology result was reported as endometrioma.

CASE 2: A 32-year-old nulligravid patient was admitted to our emergency department with the complaints of nausea, vomiting and abdominal pain for three days. On physical examination, there was defense and rebound

in the right lower abdominal quadrant. Her bimanual pelvic examination was normal. In ultrasonographic examination, the uterus was anteverted and the endometrium was observed as regular and thin. A 9x8 cm septated anechoic cyst was observed in right adnexa. Contrast-enhanced tomography of the pelvis confirmed the hypodense adnexal lesion. We performed an emergent laparoscopy and identified an approximately 8 cm cyst mass in an appearance of hydrosalpinx in the right tube with three rounds of torsion [Figure 4]. The right ovary was in a grossly normal appearance. We performed a right salpingectomy. The patient was discharged on the second postoperative day. The pathology result was reported as chronic salpingitis, hydrosalpinx with hemorrhagic infarction findings.

DISCUSSION: Endometriosis is a chronic inflammatory disease characterized by the localization of endometrial tissue outside the uterine cavity. Endometrioma occurs when the endometrial tissue obliterates the ovary. Theoretically, masses originating from the ovary can cause torsion. It is generally thought that endometriomas cause less torsion due to their adhesion to the surrounding tissue. Paraovarian and paratubal cysts constitute 10% of all adnexal masses. Diagnosis rates have increased with the use of transvaginal ultrasonography, with better differentiation of extraovarian tissue and ovarian tissue. Torsion of the isolated fallopian tube is a rare condition. It may occur due to pregnancy, hemosalpinx, hydrosalpinx, paraovarian or paratubal cysts.

Keywords: Adnexal torsion, endometrioma, isolated tubal torsion,

figure 1



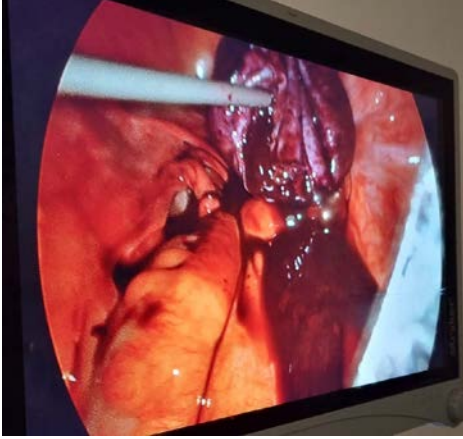
endometrioma

figure 2



three rounds of torsion in the right ovary

figure 3



detorsioned the right ovary, aspirated its content and excised the cyst wall

figure 4



isolated tubal torsion

EP-052 [Jinekoloji Genel]

A Case of Gastrointestinal Stromal Tumour Mimicking Uterine Fibroid, A Rare Case Report

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AIM: Gastrointestinal stromal tumor (GIST) is rare condition, with a reported incidence of 20 per million per year. It is the most common mesenchymal tumor of the gastrointestinal tract.

Historically, GIST was categorized as smooth muscle tumors. Thus, smooth muscle tumors histologically comprising spindle cells, arising in the pelvis may easily be mistaken with a gynaecological disorder such

as uterine fibroid or ovarian fibroma. Diagnosis of GIST on ultrasound examination can be difficult because of their similarity in appearance to gynecological neoplasms. We report a diagnostically challenging case of GIST mimicking uterine fibroid.

CASE: A 43-year-old nulliparous patient presented with complaints of lower abdominal pain and pelvic mass. He had a history of myomectomy operation four years ago. Abdominal examination revealed a soft but tender abdomen with a 16-week pregnant uterine mass. Complete blood count and hemoglobin 11.2 g/dl were observed. Tumor markers were not taken because the diagnosis of the patient was uterine fibroid. On TVUSG, a 9 x 8 cm solid cystic mass attached to the anterior part of the uterus and a 7 x 6 cm fibroid near the uterus cervix were observed. Our impression was cystic degeneration of the fibroid. The patient was informed about the situation. First of all, it was explained that myomectomy operation was planned, but the necessity of hysterectomy operation was also explained. Abdominal incision was made with Pfannenstiel incision. Nodular lesions above the rectus muscle were observed at the entrance to the abdomen. When entered into the abdomen, a mass of approximately 8 cm originating from the sigmoid meso was observed, adherent to the small intestine segment and anterior uterus. (Fig. 1,2). Sigmoid bowel resection with primary anastomosis followed by TAH BS was performed by the surgical team. Specimens were sent for urgent histological examination (HPE). Postoperative recovery was uncomplicated. The HPE of the mass showed a high-risk category malignant gastrointestinal tumor (GIST), while that of the uterus was leiomyomata with adenomyosis. The patient, who has no additional findings in the control CT, is still under the follow-up of the oncology team.

CONCLUSION: In conclusion, GISTs may mimic gynecological tumors – mostly ovarian malignancies and uterine leiomyomas. GISTs do not have a unique appearance on ultrasound examination. Searching for the ‘sliding organ sign’ may be useful to clarify the clinical situation, distinguishing a possible mass confluent with the uterus or separate from it. Gastrointestinal symptoms in a female patient with a pelvic mass must raise the suspicion of possible non-gynaecological pathology, and differential diagnoses should include GIST.

Keywords: Gastrointestinal Stromal Tumour, Uterine Fibroid, TVUSG (Transvaginal Ultrasonography), CT (Computerized Tomography)

Figure 1. Intraoperative mass on the uterus compatible with GIST

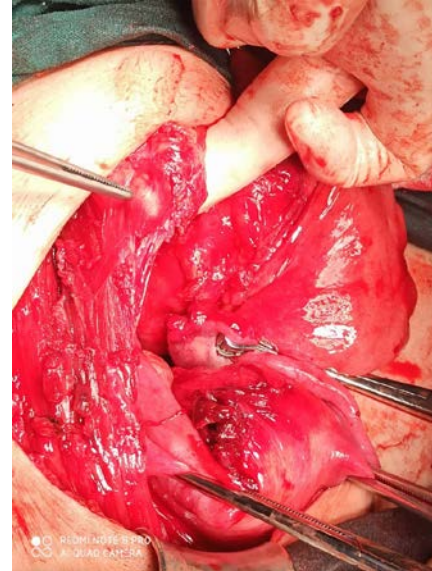


Figure 2. Excision of the mass compatible with GIST



EP-053 [Jinekoloji Genel]

Different Treatment Modalities In a patient with Resistant Heavy Menstrual Bleeding: Case Report

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GOAL: Heavy menstrual bleeding (HMB), is considered as heavy flow and longer lasting days of bleeding during menstrual period, leading to anemia. There are different treatment options for HMB, depending on the primary cause. There appears to be overall consensus among physicians that medical management should be considered as the first-line treatment. Despite their widespread use, there exists very little information regarding the effectiveness, side effects and patient satisfaction associated with the commonly used medical regimens including oral contraceptives, norethisterone (NET) and high dose oral progestins. Here we aimed to report a HMB resistant to different treatment modalities.

CASE: A 32-year-old, gravida 1 patient, presented at our emergency department clinic with the complaint of severe menorrhagia ongoing for 6 days. She reported using 12 pads per day, with soaking and flooding of one pad per hour. She was previously admitted to another clinic on outpatient basis and underwent dilatation and curettage (D&C) and was prescribed combined oral contraceptive (COC) containing 3 mg drospirenon ve 0.03 mg etinilestradiol (Yasmin®) and hospitalised one day later due to severe bleeding and received intravenous (IV) tranexamic acid in combination with COC. Her bleeding had improved after 2 days and she was discharged. She was an otherwise healthy woman except her history of chronic cholecystitis with no history of bleeding or clotting disorders. Her family history was negative for these issues as well. Vitals signs were notable for a blood pressure of 90/60 and pulse of 111. Speculum examination revealed blood clots pooled in vagina and blood oozing from the external cervical os was also observed. Admission laboratory results were notable for a

hemoglobin of 7.5 g/dL and hematocrit of 22.5%. Platelet count was normal at 268,000/microliter. Blood pregnancy test result was negative. Transvaginal ultrasound examination was normal notable for thin endometrium. Given the patient's ongoing acute blood loss leading to symptomatic anemia, she was admitted to the hospital for transfusion of packed red-blood cells, and further evaluation. Patient's laboratory evaluations revealed high liver function tests. Since the patient did not have any previous results, we could not discriminate whether the elevation in liver function tests was secondary to the previous medication she had received or to her history of chronic cholecystitis. Due to hepatotoxicity concerns, we stopped COC and instead applied subcutaneous progesterone (Progestan Dex 25 mg®) and a skin patch containing estradiol (Climara Patch®). Although patient's symptoms improved initially, bleeding episodes repeated later and required up to 4 packed red blood cell transfusions. Placement of a Foley catheter for intrauterine tamponade could not help to control bleeding and hysteroscopic endometrial ablation was subsequently performed and 3 days later she was discharged with amenorrhea. Three days later patient was hospitalised again due to repeated bleeding episode. Initially noretisterone (Primolut-N®) was given and intramuscular medroxyprogesterone acetate (Depo-provera®) was administered. One day later as bleeding reduced, LNG-IUD was inserted and patient was discharged.

RESULTS: For patients with drug-related hepatotoxic tendencies or resistant HMB, who completed child bearing, we suggest endometrial ablation or treatment with LNG-IUD.

Keywords: heavy menstrual bleeding, endometrial ablation, LNG-IUD

EP-054 [Jinekoloji Genel]

A Rare Side Effect Of Power Morcellation After Laparoscopic Myomectomy: Parasitic Subcutaneous Myoma

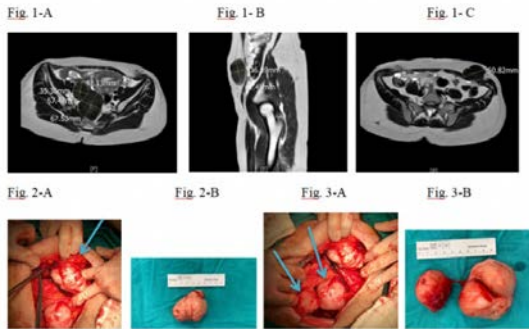
Ezgi Özkan, Kazibe Koyuncu, Emre Mat
Kartal Dr. Lütfi Kırdar Şehir Hastanesi

Morcellation is frequently used for removal of large fibroids and uterus in laparoscopic myomectomy and hysterectomy. It has side effects such as spreading of the tissues into the abdomen, disruption of the tissue sample for pathology evaluation, and injury to the surrounding tissues. We aimed to discuss the side effects of morcellation, which is used more frequently due to the increasing tendency for minimally invasive surgery, through a case study. The 36-year-old patient with a history of 1 vaginal birth and 2 cesarean sections, was admitted to the hospital on 06.12.2018 with complaints of dysmenorrhea and menorrhagia. A fibroid of approximately 5 cm was detected on the uterus. Laparoscopic myomectomy was performed on 18.03.2019 and myoma was removed by morcellating from the left lower quadrant trocar. There were no complications, and the patient was discharged on the second postoperative day. The definitive pathology result was reported as leiomyoma. The patient applied to the general surgery outpatient clinic on 12.11.2020 (approximately 20 months after the operation) with complaints of abdominal pain and palpable swelling in the abdomen. A palpable swelling was detected on the left lower quadrant. The palpable swelling was reported as endometriosis on USG. The patient was referred to our clinic. The patient applied to our clinic on

18.10.2021 with the complaint of enlargement of the palpable mass. Pelvic MRI “A well-circumscribed T1-T2 hypointense lesion with a lobulated contour reaching approximately 10 cm in diameter was observed in the right adnexal lodge [Fig. 1-A]. A well-circumscribed T1-T2 hypointense lesion with a lobulated contour of 4 cm in diameter was observed in the subcutaneous soft tissue on the left anterior wall of the pelvic region.[Fig. 1-B and 1-C]” reported as. Subcutaneous tissues were opened with sharp and blunt dissections for parasitic myoma, which was approximately 4-5 cm above the Pfannenstiel incision and compatible with the left lower trocar site. Subcutaneous myoma was removed [Fig.2A-B]. In intra-abdominal observation, there were 2 interconnected myomatous structures in the right lower quadrant. The larger myoma was about 8 cm, originating from the meso of the rectosigmoid colon and was connected to the smaller one with a thin band. The smaller one was approximately 5 cm and was attached to the peritoneum on the right pelvic side wall. [Fig.3A-B] All parasitic myomas in the were removed and sent to pathology. Definitive pathology result was reported as myoma for all three masses. The patient, who did not have any complications in the postoperative period, was discharged on the second postoperative day. It should be known that morcellation is not only in malignant cases, in benign cases as our case, the tissue can spread intra-abdominal and even subcutaneously. These cases often required re-exploration. In an attempt to avoid tumor dissemination, electromechanical morcellation has been performed with the uterine specimen contained and morcellated in a laparoscopic bag. In the preoperative period, patients should be informed about medical and surgical treatment options. With this information, the patient should choose the surgical approach and share the responsibility.

Keywords: morcellation, parasitic myoma, subcutaneous myoma

Case



EP-055 [Jinekoloji Genel]

Impact of the covid 19 pandemic on clinical presentation of ectopic pregnancies

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AIM: Ectopic pregnancy (EP) is the occurrence of implantation outside the uterine cavity. Approximately %95 of the cases is tubal ectopic pregnancy. The treatment of ectopic pregnancies detected in the early pregnancy week medically, the treatment of ectopic pregnancies in further weeks are carried out surgically. % 15 of EP cases are ruptured. If it is not diagnosed at an early stage, ectopic pregnancy can lead to a gynecological emergency resulting in hypovolemic shock and maternal

death. In this case, treatment is provided by emergency surgical operation. Cause of EP rupture can be seen by % 0.1-0.3 maternal death. In the late 2019, the coronavirus disease (COVID-19) epidemic started in China and then spread all over the world. The first COVID-19 cases in our country are diagnosed in March 11 2020. Accordingly, various restrictions have been introduced to prevent the spread of the virus in our country and in the world. Receiving medical service has been kept in the forefront as a basic need and is maintained in each digit of the health system. Despite these applications, COVID-19 has been a reduction in our country and the world in the world of patients with the findings that have not supersede. For this reason, we aim to evaluate whether this behavior of this behavior throughout the society is causing delay in the diagnosis and treatment of EP and increasing the possibility of rupture EP.

METHODS: The study was carried out retrospectively in Dokuz Eylül University Hospital Gynecology and Obstetrics Clinic. Groups with EP diagnosis were defined as January 2018-February 2020 (Group 1, n:56) and March 2020-February 2022 (Group 2, n:38). Demographic characteristics, laboratory results, clinical findings, imaging studies and responses to medical/surgical treatment of the groups were compared. Statistical analysis was performed using SPSS version 25.0 (IBM Inc., Chicago, IL, USA). Student's t-test was used to compare parametric variables, Mann-Whitney U test, Chi-square test and Fisher precision test were used to compare non-parametric variables. A p value of <0.05 was considered statistically significant.

RESULTS: Demographic, clinical, laboratory and ultrasound data are similar to the groups of groups compared. In addition, the patient number of patients undergoing surgical operation is not vary between groups. The findings of these patients; labarotuar values, ultrasound and surgical findings were not statistically differentiated.

CONCLUSION: The clinical presentation and complications of the ectopic pregnancies were not affected by the pandemic. Compared to similar studies in the literature, it is determined that our study contains more cases. This content reflects the power of our study.

Healthcare providers are on the frontlines of battling the COVID-19 that's spreading rapidly throughout our nation and world. Thank you for the devotion you make, every day and especially during this pandemic.

Keywords: ectopic pregnancy, pandemic, rupture

Table 1. Demographic features of groups

	Group 1 N: 56	Group 2 N:38	P-value
Maternal age (years)	32.3±5	33±5.7	0.2
Gravidity	2.6±1.6	2.6 ± 1.3	0.8
Parity	0.6±0.7	1±1.1	0.1
Previous abortus	26(%46)	12(%31)	0.1
Previous ectopic	9(%16)	4(%10)	0.4
Previous molar	0	0	
Previous C/S	17 (%30)	10 (%26)	0.17
IUD	1(%1.7)	1(%2.6)	0.7
OCP	0	0	
Smoking habits	4 (%7)	1 (%2.6)	0.6
Previous gynecological operation	8(%14)	9(%23)	0.2
Assited contraception	4(%7)	6(%15)	0.1
Gestation age	6.1±1.3	6.3±1.1	0.4
Prior ultrasound	38(%67)	26(%68)	0.9
C/S: Cesarean section, IUD:Intrauterine device, OCP: Oral contraceptive pills			

Table 2. Clinical, laboratory and ultrasound findings at presentation among groups

	Group 1 n: 56 (%59.5)	Group 2 n: 38 (%40.5)	p-value
A) Clinical			
Abdominal pain	43 (%76)	22 (%57)	0.05
Vaginal bleeding	47 (%83.9)	27 (%71)	0.1
B) Laboratory			
β -hCG level (iu/mL)	7586 \pm 18089 (57-10782)	5948 \pm 8871 (75-45314)	0.7
HB (units)	11.6 \pm 1.5 (7.7-14.4)	11.9 \pm 1.2 (9.4-14.6)	0.5
C) Ultrasound			
Endometrial thickness	10 \pm 4.5 (2-20)	9.4 \pm 3.2 (4-15)	0.6
Desidual reaction	19 (%33)	10 (%26)	0.4
Extrauterine mass			0.3
None	1 (%1.7)	4 (%10.5)	
Cornual	1 (%1.7)	1 (%2.6)	
Interstitial	0 (%0)	0 (%0)	
Tubal	38 (%67.8)	21 (%55.2)	
Ovarian	1 (%1.7)	1 (%2.6)	
Cervical	1 (%1.7)	1 (%2.6)	
Scar	0 (%0)	2 (%5.2)	
Heartbeat	6 (%10.7)	2 (%5.2)	0.9
Increased abdominal free fluid	33 (%58)	25 (%65)	0.5
D) Covid test results		Positive 0 (%0) Negative 38 (%100)	

Table 3. Treatment and outcome in cases and controls

	Group 1 N: 56	Group 2 N: 38	P-value
A) Management			0.4
Expectant	7	4	
Methotrexate	24	14	
Laparoscopy	13	10	
Laparotomy	6	1	
Laparoscopy+ Laparotomy	0	1	
D/C	1	1	
Methotrexate+ Laparoscopy	2	1	
Methotrexate+ Laparotomy	1	1	
Methotrexate+ D/C	1	0	
Additional methotrexate dose requirement	1	5	
B) Perioperative free fluid	20 (%35)	13 (%34)	0.8
C) Hospitalization (days)	2.5 \pm 1.7	3.1 \pm 2.9	0.9
D) Blood transfusion	11 (%19.6)	7 (%18.4)	0.8

Table 4. Comparison of cases who underwent emergency surgery with rupture indication

	Group 1 N: 19/56 (%33.9)	Group 2 N: 12/38 (%31.5)	P-value
A) Management			0.1
Laparoscopy	13/19 (%68)	10/12 (%83.3)	
Laparotomy	6/19 (%32)	1/12 (%8.3)	
Laparoscopy+ Laparotomy	0 (%0)	1/12 (%8.3)	
B) Laboratory			
β -hCG level (iu/mL)	12570 \pm 10239	18523 \pm 7000	0.2
Preoperative HB (units)	11.2 \pm 1.6	11.7 \pm 1.3	0.3
Postoperative HB (units)	9.3 \pm 2	8.9 \pm 1.6	0.5
C) Ultrasound			
Increased abdominal free fluid	14/19 (%73.6)	11/12 (%91.6)	0.3
Extrauterine mass			0.7
Cornual	1/19 (%5)	1/12 (%8.3)	
Tubal	18/19 (%95)	11/12 (%91.6)	
D) Perioperative free fluid	17/19 (%89.4)	12/12 (%100)	0.3
E) Hospitalization (days)	3 \pm 0.8	3.2 \pm 1.2	1
F) Blood transfusion	7/19 (%36.4)	6/12 (%50)	0.4

EP-056 [Jinekoloji Genel]

Retroperitoneal schwannoma mimicking uterine myoma: case report

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OBJECTIVE: To describe the case of a retroperitoneal schwannoma mimicking uterine myoma

Design: Case report

Setting: A university hospital

Patient: A 45-year-old patient with anormal uterine bleeding and uterine myomas

Intervention: Total abdominal hysterectomy, bilateral salpingectomy, ureterolysis, retroperitoneal mass excision

RESULT: A 45-year-old, gravida 3 parity 2, patient, was referred to our clinic due to abnormal uterine bleeding. On the ultrasound evaluation of the patient, multiple myomas were observed in the uterus. On abdominal CT, it was defined as a 77x66x85 mm mass containing necrotic, solid and cystic areas at the level of the iliac bifurcation in the left paraaortic area. It has been reported to be adjacent to the left kidney. Serum levels of the tumor markers are between the normal range. The patient subsequently underwent laparotomy with midline abdominal incision. During the procedure, many myomas originating from the uterus were detected. No pathology was detected in bilateral adnexal structures. Total abdominal hysterectomy and bilateral salpingectomy were performed. The described mass was detected in the retroperitoneal region of the left lower abdomen. The retroperitoneal space was dissected. The encapsulated mass was separated from the surrounding tissue. It was then excised from the retroperitoneum. Pathology evaluation during the operation was reported as mesenchymal neoplasia. The final pathology report was ancient schwannoma.

CONCLUSION: Usually, the solid benign tumors of retroperitoneum can mimic a uterine myoma due to similarities in ultrasonographic features, especially in cases of schwannomas. Ancient schwannoma is rare subtype of retroperitoneal schwannoma, that is often clinically undetected or misjudged for other diseases. Followed with post-operative histopathological examination can be used to confirm the diagnosis. However, controversy still does exist over the necessity of negative tissue margin during operative treatment. Surgical resection has been reported to be suitable for the treatment of schwannomas. Most cases are benign, although malignant tumors have occasionally been reported. Despite incomplete resection of the tumor, the risk of recurrence and metastasis is considered to be low. The tumor has a recurrence rate of %5–10, but metastasis has not been reported. In our case, the treatment of choice was complete excision of the tumor. The prognosis was good, and excision was considered to be curative in this case.

Keywords: retroperitoneal mass, schwannoma, uterine myoma

Figure 3. Retroperitoneal abdominal schwannoma located in the left paraaortic area, at the lever of the aortailiac bifurcation

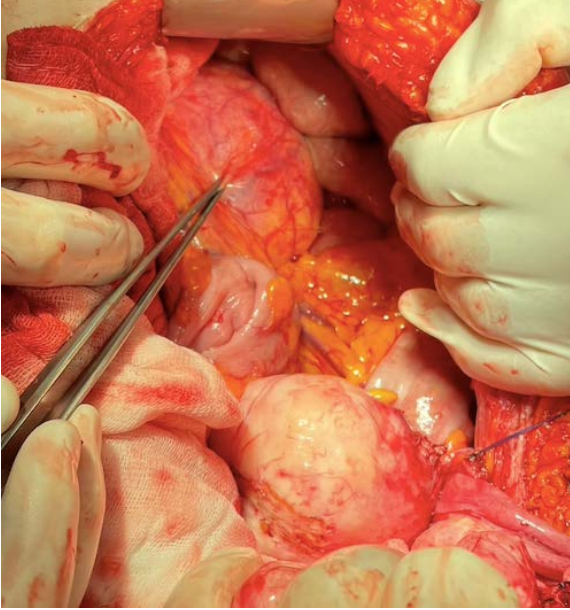


Figure 4. Retroperitoneal area after excision of the mass

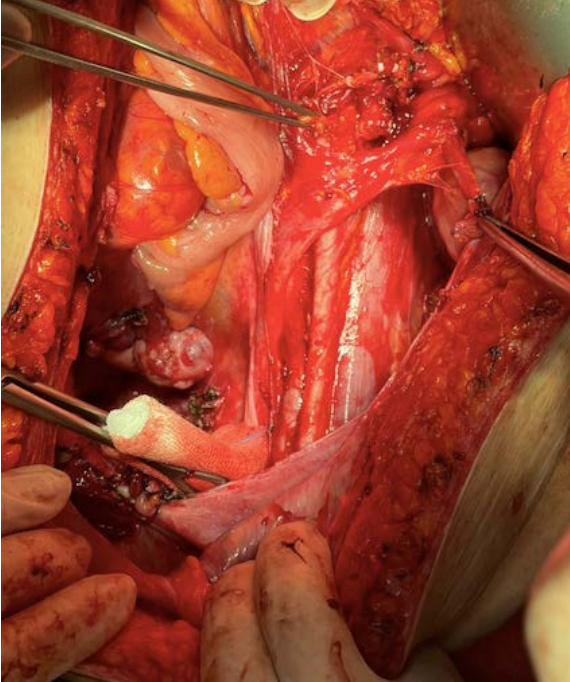


Figure 5. Excision of the whole mass with intact capsule



Figure 1. Many myomas originating from the uterus

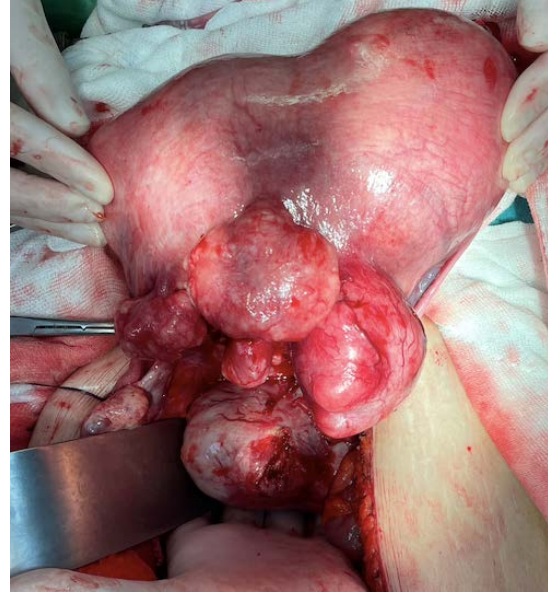
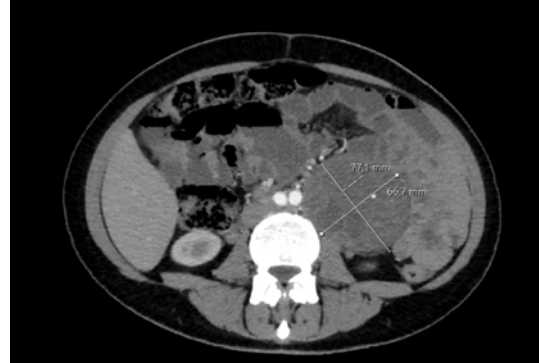


Figure 2. Computerised tomography (CT) of retroperitoneal schwannoma



EP-057 [Jinekoloji Genel]

Uterus preserving approach in cesarean scar pregnancy in the spectrum of placenta accreta: case report

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OBJECTIVE: To describe the uterus-preserving approach in cesarean scar pregnancy (CSP) in the spectrum of placenta accreta

Design: Case report

Setting: A university hospital

Patient: A 28-year-old woman, gravida 3, parity 2, with 2 previous cesarean deliveries (CD) was referred at 9 weeks' gestation for suspicion of CSP.
Intervention: Dilatation-curettage (D/C) with carmen cannula followed by laparotomy bilateral uterine artery ligation and segmental scar pregnancy excision

RESULT: On transvaginal US imaging, an intrauterine 9-week viable embryo was detected, with the gestational implanted low on the anterior

uterine wall at the level of a previous CD scar. The myometrium behind the gestational sac measured less than 5 mm, and the upper uterine cavity and cervical canal were empty. The couple was counseled about a high suspicion of CSP, and possible complications and treatment options were presented: surgical termination of the pregnancy according to our local approach or expectant management with the likelihood of spectrum of placenta accreta (PAS) and higher maternal morbidity and mortality at the time of delivery. After counseling, the couple opted for surgical termination, and the procedure was performed in the operating theater under general anesthesia. Approximately 1500 ml of bleeding occurred during the ultrasound-guided D/C procedure. The patient's hemodynamics became unstable. Termination of scar pregnancy could not occur. Laparotomy was decided. During laparotomy, it was observed that a swollen pregnancy mass was located on the cesarean scar line adjacent to the bladder. Bilateral hypogastric arteries were ligated to minimize blood loss. The mass was resected segmentally. Diagnosis confirmed by final pathology report.

CONCLUSION: The presented case presents specific images of advanced cesarean scar pregnancy. Surgical methods were applied step by step. It demonstrates successful surgical treatment of segmental CSP resection after hypogastric artery ligation. In our patient, the uterus was preserved. In the follow-up of the patient, no additional intervention was required and menstruation continued.

Keywords: bilateral uterine artery ligation, cesarean scar pregnancy, spectrum of placenta accreta

Figure 1. Transvaginal ultrasound picture of a cesarean scar ectopic pregnancy of 9 weeks with cardiac activity



Figure 2. Close localization of gestational sac to the bladder is seen



Figure 3. Loss of clear zone; normal hypoechoic retroplacental zone in the myometrium under the placental bed is not visible on ultrasound



Figure 4. Empty cervix; cesarean scar ectopic pregnancy not located in the cervix



Figure 5. Finding at surgery; neovascularization and myometrial distension over cesarean scar area

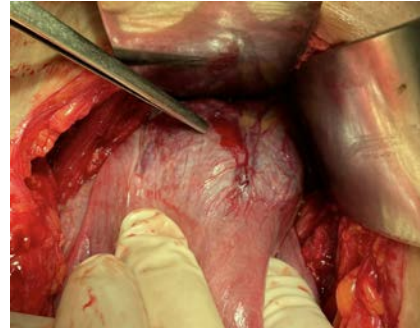
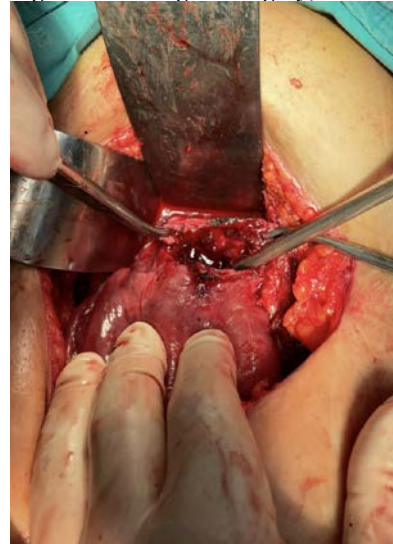


Figure 6. Findings at surgery; uterine window



EP-058 [Jinekoloji Genel]

Removal of intrauterine device (IUD) perforating the bladder wall by a successful laparotomy and cystoscopyAysun Firat, Aysegul Ercan, Irem Yaman Ruhi, Fatma Ferda Verit Atmaca

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INTRODUCTION: Intrauterine devices (IUDs) are among the most common methods of contraception. However, they may cause pelvic infection and may lead, very rarely, to the uterine perforation by migration to the adjacent tissues. IUD migration has been reported in the intraabdominal organ or spaces, such as omentum, rectosigmoid, peritoneum, appendix or bowels, and in other different regions of the body, such as adnexial region, iliac veins or bladder. The risk of uterine perforation has been considered to be higher during the first application of IUD at insertion or early after vaginal birth where the cervix is not closed totally, or due to scar tissue or weakness in the uterine wall caused by multiple cesarian sections.

CASE: A 33 year-old woman was seen in our outpatient clinic, with complaints and symptoms of intermittent hematuria and dysuria for a long period. Detailed history of the patient revealed G3P3 (3x c/s), and IUD insertion 6 years ago. There was no chronic disease or drug consumption. On physical examination, the general status was good, and the vital signs and abdominopelvic exam were normal. Collum uteri was clean, without any sign of bleeding, and there was no any sign of IUD. Transvaginal ultrasonography (TVUSG) showed normal uterus and ovaries, and the endometrium was regular in shape and in thickness (10 mm). There was no fluid shadow in the space of Douglas, but an hyperechogenic foreign body (IUD) perforating all layers of bladder wall at the superior pole, causing a vegetating area around, was seen (Picture 1). Blood biochemistry and urinalysis were within normal limits, except a 3+ hematuria. Plain abdominal X-ray revealed a dislodged IUD at the pelvic region (Picture 2). The patient was admitted with a diagnosis of UID displacement into the bladder wall, and underwent cystoscopy revealing the IUD. Then, she underwent laparotomy, and the IUD was successfully removed (Pictures 3 and 4). Perforated bladder wall was repaired by double layered sutures, and a Foley catheter was placed. The patient was discharged home since there was no postoperative complication, and the sutures and catheter was removed on postop day 10 in the outpatient clinic.

CONCLUSIONS: Displacement of IUD to the intraabdominal organs or the adjacent tissues is a rare complication. In this reported case, the presentation such as chronic dysuria and intermittant hematuria, and the patient history of multiple cesarean sections were notable. Intravesical IUD migration should be kept in mind and the diagnosis should be confirmed, with detailed history taking, physicals and diagnostic tools, for a successful treatment.

Keywords: Intrauterine device (IUD), bladder, laparotomy, bladder wall raphy, cystoscopy

Picture 1.



TVUSG.

Picture 2.



Plain XR.

Picture 3.



Cystoscopy.

Picture 4.



Successfully removed IUD

EP-059 [Jinekoloji Genel]**Dissecting Leiomyoma and Intravenous Leiomyomatosis**

Ömür Albayrak

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OBJECTIVE: Dissecting leiomyoma and intravenous leiomyomatosis are rare variants of leiomyoma. In dissecting leiomyoma, smooth muscle tumor islets surrounded by a hydropic matrix penetrate into the adjacent myometrium, sometimes outside the uterus and into the broad ligament and are treated like classical fibroids. Intravenous leiomyomatosis is characterized by the proliferation of benign smooth muscle cells histologically similar to uterine myomas as worm-like lesions in the uterine and pelvic veins, vena cava, and sometimes extending to the heart. In this article, we aimed to present a hysterectomized case who was operated for a pelvic mass with the pathology result reported as dissecting leiomyoma and intravenous leiomyomatosis.

CASE: A 45-year-old patient with a history of G3P3, 3 normal births and a history of total abdominal hysterectomy for myoma 4 years ago was admitted to our clinic with the complaint of abdominal swelling. On physical examination of the patient, a palpable mass in the abdomen, and a multiseptal mass with cystic and solid components measuring 15*10 and 10*13 cm in transvaginal ultrasound examination were observed. On abdominopelvic tomography, a complex lesion with a multiseptal structure with intense contrast enhancement was observed in the septa, with a total size of 24*13*16 cm, filling the small and large pelvis almost completely. The patient's tumor markers, upper gastrointestinal endoscopy and colonoscopy evaluations were normal. The patient underwent laparotomy with the diagnosis of pelvic mass. During the operation, 2 masses of 15 and 10 cm in diameter, thought to originate from the left ovary, filling the pelvis were excised and sent for frozen examination. Frozen examination was reported as dissected leiomyoma. The patient underwent mass excision + bilateral salpingoophorectomy. Post-operative follow-up was uneventful and the patient was discharged on the 2nd postoperative day. In the final pathology result of the patient, it was reported that a benign tumoral mass consisting of edematous smooth muscle fibers and containing hyalinized venous vascular structures was observed, the tumor was SMA and Desmin+ and stained positively with CD 31 and F8, and the findings were consistent with dissecting leiomyoma+intravenous leiomyomatosis.

CONCLUSION: Extrauterine localized pelvic Benign variants of leiomyomas should also be kept in mind in the differential diagnosis of masses. These lesions may mimic malignancies with physical examination and imaging findings.

Keywords: myoma uteri, abdominal pain, menorrhagia

EP-060 [Jinekoloji Genel]**Myoma Torsion: Rare cause of acute abdomen in pregnancy**Ömür Albayrak¹, Merve Ecem Albayrak²¹Bolu Private Cagsu Hospital, Bolu²Bolu İzzet Baysal Üniversitesi Eğitim ve Araştırma Hastanesi, Bolu

INTRODUCTION: Due to the changes in anatomy and physiology during pregnancy, clinicians have difficulties in the diagnosis and treatment of acute abdomen. Abdominal pain may develop due to obstetric reasons as well as due to intra-abdominal and pelvic organs. Leiomyomas are benign gynecological tumors that are frequently encountered in the late reproductive period. They often do not show any symptoms. Myoma degeneration can cause pain in pregnancy by torsion of the pedunculated fibroid or torsion of the uterus due to the mass effect. A case of torsion myoma who underwent surgery with the diagnosis of acute abdomen during pregnancy is discussed.

CASE: A 31-year-old patient applied to the emergency department with abdominal pain at 12 weeks of gestation. She was the third pregnancy and her other deliveries were by cesarean section. There was a previous myomectomy operation. In the USG: FKA +, afi is sufficient, CRL: 12 weeks and two days. A subserous fibroid of approximately 10*9 cm was detected in the right part of the uterus fundus. On physical examination, defense and rebound were detected in the lower abdominal quadrant. Cervix and vagina were normal in vaginal examination. In the complete blood count, leukocytes were found to be 17000, neutrophil 79.3%, hemoglobin 10.5 g/dl. In transvaginal ultrasonography, the cervix was measured at 43 mm in length, and both ovaries were found to be of normal size and structure. Explorative laparotomy was performed with the diagnosis of acute abdomen. The abdomen was entered with a phannesteil incision under general anesthesia. Minimal fluid was detected in the right paracolic area on exploration. A 10 cm, purple, subserosal myoma, covered with omentum, originating from the uterine corpus, strangulated by rotating around its own pedicle, was observed. Myomectomy was performed. Pathological examination revealed signs of acute torsioned leiomyoma that caused severe venous circulation insufficiency. Pregnancy was followed in its normal course in the post-operative period and in the antenatal follow-up of the case, and cesarean delivery was performed at 36th gestational week due to obstetric reasons.

DISCUSSION: Diagnostic difficulties are experienced in patients presenting with both physiological changes during pregnancy and acute abdomen, because the results of physical examination, laboratory and imaging methods change, and most of the obstetric complications are unpredictable. Causes of abdominal pain in pregnant women can be classified as obstetric and non-obstetric. USG should be preferred primarily as a diagnostic imaging method in pregnant women with abdominal pain, since it is safe. Uterine leiomyomas are common smooth muscle tumors in reproductive age. Nowadays, with the advancement of average maternal age, pregnancy follow-up complicated by uterine fibroids is more common. Timely diagnosis and treatment is very valuable for both mother and fetus. A missed diagnosis may cause maternal morbidity, mortality, fetal loss and risk of preterm delivery. A multidisciplinary approach should be taken to a pregnant woman who is thought to have an acute abdomen, the obstetrician and the surgeon should act together, if necessary, additional consultations from other branches should be requested.

Keywords: Myoma uteri, abdominal pain, subserosal myoma

Torsioned fibroids



Torsioned subserous fibroids wiew

EP-061 [Jinekoloji Genel]

A case of myomectomy performed during cesarean delivery

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INTRODUCTION: Leiomyomas are benign tumors arising from uterine smooth muscle cells. They are seen at a rate of approximately 0.05-5% during pregnancy. While the size of myomas may increase during pregnancy; After pregnancy, this increase stops and shrinkage is detected. Myomas in pregnancy; It can cause many complications such as miscarriage risk, fetal growth retardation, malformation and malposition, risk of preterm birth, premature rupture of membranes, placental abruption, postpartum hemorrhage and sepsis. Performing myomectomy during cesarean section is generally avoided because of the risk of serious hemorrhage and increased postoperative morbidity. In our study, we aimed to present a case in which we had myomectomy during cesarean section.

CASE: We followed closely a 39-year-old patient with her third pregnancy due to myoma uteri. There was no problem in obstetric follow-ups. In the examination performed at the beginning of the pregnancy, we detected a 5 cm intramural fibroid originating from the uterine fundus. In the examination performed at the 38th gestational week of the patient, we detected a myoma with a diameter of 11 cm located on the right part of the fundus of the uterus. We took the patient for cesarean delivery for obstetric indications. We delivered a 2900 g male baby. During the operation, we detected an intramural myoma with a subserous component, approximately 12 cm in size, located in the right part of the uterus fundus. Myomectomy was performed by making a vertical incision in the uterus. The incision line was sutured. While the patient's initial Hb value was 12.1, the postoperative blood value was 8.1. Two erythrocyte suspensions were administered to the patient. On the 3rd postoperative day, the patient was discharged with full recovery.

DISCUSSION: Performing myomectomy during cesarean section is a controversial issue in the field of obstetrics. Bleeding and atony are more common in a myomatous uterus than in a normal uterus, since adequate uterine contraction cannot be achieved after delivery. Many obstetricians avoid myomectomy during cesarean section, especially due to bleeding and the risk of undergoing hysterectomy. In addition, large intramural fibroids in the uterus may prevent the formation of effective contractions in the uterus in the postpartum period, and as a result, bleeding due to uterine atony can be seen in the early period. In our case, we performed myomectomy during cesarean delivery, upon the patient's request for myomectomy. We had to apply erythrocyte suspension in the postoperative period to the patient who had a decrease in hb values due to blood loss during myomectomy. The present case shows that myomas detected during delivery grow during pregnancy and performing myomectomy during cesarean section increases the need for blood transfusion to the patient.

Keywords: myoma uteri, myomectomy, pregnancy

Uterus view



myoma image in the uterine fundus

Myoma



Removed myoma specimen

Uterus after myomectomy



Uterine incision line after myomectomy

EP-062 [Obstetri Genel]

Emergent Management of Severe Postpartum Immune Trombocytopenia by Gynecologists

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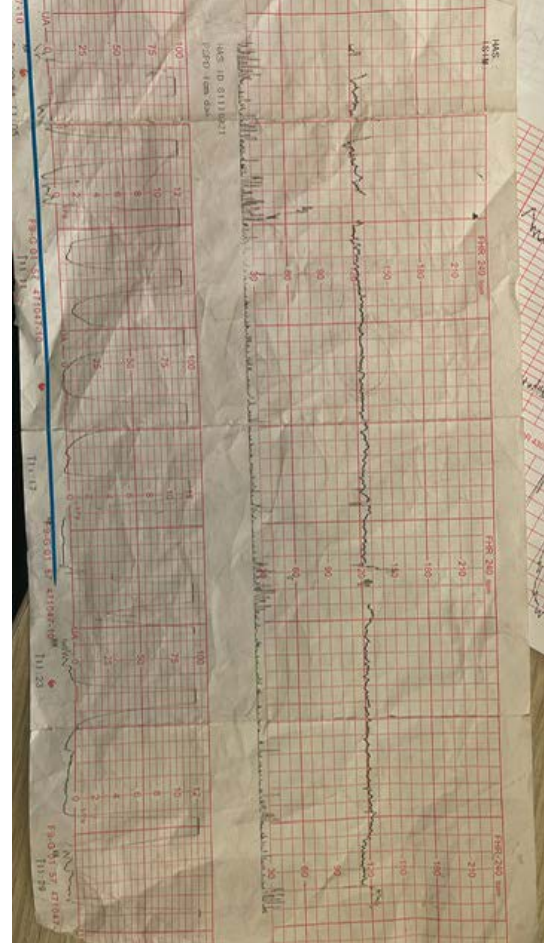
Introduction: Management and treatment of thrombocytopenia during pregnancy and the postpartum period are difficult and may be directly related to pregnancy, while some may be unrelated. Generally there isn't enough time for diagnostic evaluation and emergent management may be needed for especially severe thrombocytopenia. There is risk of severe bleeding when the platelet counts are below 10,000 to 20,000/microL especially for invasive procedures including vaginal or cesarean delivery.

CASE: 22-year-old gravida 3 para 1 abort 1 women admitted to the emergency with the complaint of not being able to feel the movements of the fetus. Fetal ultrasonographic measurements revealed 33 to 34 weeks of gestation that was in accordance with her last menstrual period with normal amniotic fluid index. Non-stress test was non-reactive with loss of variability which is category 2 (figure 1). With diagnosis of acute fetal stress, cesarean section was performed immediately without waiting for her blood results. During the operation, approximately 5-6 cm hematoma was seen on the posterior isthmus region beneath the left edge of Kerr incision and squeezed with additional sutures. A live male newborn with an Apgar score of 4 was resuscitated and interned in neonatal intensive care unit but died in postpartum 8th hours. For the laboratory tests taken at admission, there were no abnormality related to electrolytes, her blood urea and creatin together with AST and ALT were in normal range. Her hemogram parameters were as follows; white blood cells 12,13 $10^3/\mu\text{L}$, hemoglobin 12.9 g/

dL, hematocrit 37 % and platelet $22 \times 10^3/\mu\text{L}$. The hemogram was repeated within a citrate tube but the platelet count was $21 \times 10^3/\mu\text{L}$ again. There was no abnormality regarding coagulation tests. Levels of total bilirubin, direct bilirubin, amylase, lipase were all in normal range and she has slightly higher CRP level of 7,10 mg/L (0 – 5). The low levels of platelets were confirmed under peripheral smear of blood. After replacement of 2 units of thrombocyte suspension, the platelet count was seen to be lowered to $12 \times 10^3/\mu\text{L}$. Firstly 20 mg intramuscular dexamethasone was injected immediately. Because there were no hematologists in our hospital and having risk of spontaneous bleeding with any additional shake, she was consulted via 112 service to an expert. According to her recommendation after premedication with 45.5 mg pheniramine hydrogen, 8 mg dexamethasone and 1 gr paracetamol; 50 mg IVIG was given by starting with 10mg and adding 10 mg more by every 15 minutes under monitorization. All the precautions were taken for the possible allergic reactions and no adverse immune reaction was observed. At the second day of cesarean section, she was discharged with the hemoglobin value of 8,5 g/dL and platelet value of $62 \times 10^3/\mu\text{L}$ with recommendation of hematology control. **CONCLUSION:** The platelet transfusion should be given under $20 \times 10^3/\mu\text{L}$ for the presence or risk of severe bleeding regardless of underlying causes of thrombocytopenia. For the conditions that the platelets are being destroyed due to immune thrombocytopenia, glucocorticoids and IVIG (intravenous immunoglobulin) can be given to the patient by the gynecologist too under emergent circumstances by taking precautions.

Keywords: immune thrombocytopenia, pregnancy, emergent treatment

figure 1



Non-stress test showing loss of variability

EP-063 [Obstetri Genel]

An Atypical Uterine Rupture CaseHüseyin Güray Biçer

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Introduction: A uterine rupture is a complete division of all three layers of the uterus. Most uterine ruptures occur when the uterus is gravid in the setting of a trial of labor after cesarean delivery. Clinicians must remain vigilant for signs and symptoms of uterine rupture as it is associated with serious morbidity and mortality for both the mother and fetus. (1) A uterine rupture can cause abdominal pain, vaginal bleeding, a change in the contraction pattern, or a nonreassuring fetal heart rate tracing. The increased risk of uterine rupture for women labouring with a uterine scar is exacerbated by the use of prostaglandins for induction of labour. (2)

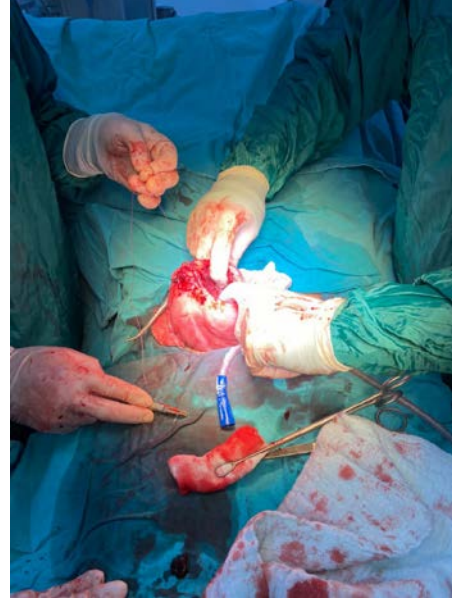
Case: A 25 year old pregnant woman, who is in 36th week of gestation, applied to our clinic with mild abdominal pain and decrease of the feeling of babies movement. By ultrasonography we found lack of babies heart beats and abnormal placental placement. The patient declared that she gave birth one time with C-Section and she had 3 abortion. She also had 2 time hysteroscopy because of uterine septum. On the CTG there was no contractions visible and the patient had no vaginal bleeding. We made emergency C-Section and found that the fetus with placenta were out of uterus and there was a ruptured area on the fundus of uterus. The dead fetus and placenta were taken from abdominal space. We closed the ruptured area of the uterine fundus with Number 2 Vicryl. The patient was followed up in our service for 1 week and discharged with information of possible future pregnancies.

Conclusions: Uterine rupture is a life-threatening complication associated with pregnancy. Should one occur, a multidisciplinary response is required to minimize risk for maternal and fetal morbidity. A suspected uterine rupture requires immediate attention and should be treated with urgent laparotomy. (3)

It should be considered, that uterine rupture can occur even after hysteroscopic interventions. As conclusion of this kind of interventions we can face off with atypical uterine rupture cases.

References: 1. Gibbins KJ, Weber T, Holmgren CM, Porter TF, Varner MW, Manuck TA. Maternal and fetal morbidity associated with uterine rupture of the unscarred uterus. *Am J Obstet Gynecol.* 2015 Sep;213(3):382.e1-6. 2. Smith GC, Pell JP, Pasupathy D, Dobbie R. Factors predisposing to perinatal death related to uterine rupture during attempted vaginal birth after caesarean section: retrospective cohort study. *BMJ* 2004; 329:375. 3. Society of Obstetricians and Gynaecologists of Canada. SOGC clinical practice guidelines. Guidelines for vaginal birth after previous caesarean birth. Number 155 (Replaces guideline Number 147), February 2005. *Int J Gynaecol Obstet.* 2005 Jun;89(3):319-31.

Keywords: hysteroscopy, intrauterine dead fetus, uterine rupture

Rupture

EP-064 [Obstetri Genel]

Serum Decorin Levels in Early Diagnosis of PPRM in Second and Third Trimester PregnanciesHüseyin Güray Biçer¹, Necdet Öncü²¹Department of Gynecology and Obstetrics, Besni State Hospital, Adiyaman, Turkey²Department of Gynecology and Obstetrics, Kanuni Sultan Suleyman Training and Research Hospital, Istanbul, Turkey

OBJECTIVE: In this study, we primarily examined the serum decorin protein levels in patients diagnosed with PPRM in our clinic. We aimed to investigate whether there is a relationship with serum decorin levels in second and third trimester pregnant women with PPRM.

METHODS: This study is a prospective controlled study. All statistical analyzes were performed using IBM SPSS 26.0 statistical package program and Microsoft Excel V 2019. After necessary biochemical processes are done optical density values were calculated by putting it into the Enzyme-Linked Immuno Sorbent Assay (ELISA) reader, which was adjusted to 450 nm wavelength.

RESULTS: The mean plasma decorin level was 14.7 ng/ml in the PPRM group and it was not found to be significantly lower than the control group with the mean plasma decorin level of 17.5 ng/ml ($p=0.339$). A significant correlation was found between plasma decorin levels and BMI in both groups ($p<0.05$). In the PPRM group, no significant correlation was found between the latent time from sampling to delivery of the pregnant woman ($p=0.153$).

CONCLUSIONS: We concluded that the approach to diagnose or predict PPRM by determining the serum decorin levels that we aimed in our study is not currently possible.

Keywords: APGAR, decorin, preterm prelabor rupture of membranes

EP-065 [Obstetri Genel]

A Rare Case of Neglected Pregnancy: Lithopedion

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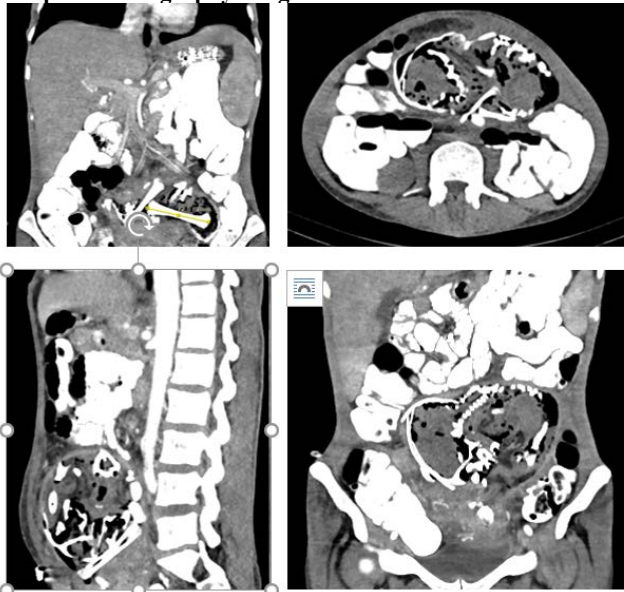
OBJECTIVE: Lithopedione is a rare obstetric entity that can cause life-threatening complications in which a dead calcified fetus or only fetal bones remain outside the uterus. We present our 40-year-old patient who applied to us with acute abdomen and intestinal perforation, diagnosed with lithopedion and operated on, to raise awareness.

CASE: The 40-year-old patient, who applied to us with the complaints of persistent vaginal discharge, abdominal pain and weight loss in the last 1 month, had nonspecific ultrasound and examination findings. The patient, who was found to be a neglected dead fetus in advanced imaging, was taken to emergency laparotomy due to the signs of acute abdomen and sepsis. Rupture area on the infected uterus, extrauterine fetal bone structures and perforation area on the sigmoid colon were detected. The patient underwent hysterectomy bilateral salpingectomy and a temporary colostomy was opened. The patient, whose treatment was completed on the 11th postoperative day and whose general condition was good, was discharged from hospital. After 6 months, he was called to general surgery control for colostomy revision.

CONCLUSION: A rare case, complicated by intestinal perforation, in which the dead fetus remained in the abdomen after uterine rupture, was successfully managed. Lithopedione, which is very rare, should be kept in mind in patients presenting with acute abdomen.

Keywords: Lithopedion, acute abdomen, fetus in utero mort

Computed tomography image



A. Fetal femur length at the coronal section, B. Fetus silhouette in axial section, C. Sagittal section, D. Fetus silhouette in coronal section

Lithopedion Case Pictures



A: Rupture area at the uterine scar line B: Intestinal meso where the fetus rests in the abdominal cavity C: Fetal bone structures

EP-066 [Obstetri Genel]

Prenatal diagnose and follow up for rhabdomyoma: case report

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Hence heart tumours are the most common fetal tumour making up nearly 1/4 of all tumours diagnosed prior to birth. Most common fetal primary heart tumours are rhabdomyomas. Usually in benign nature. The course of this diagnosis ranges from an asymptomatic case to case presenting with signs of heart failure during the fetal period. The complications associated with rhabdomyoma are effusions, fetal hydrops, obstruction of the ventricular outflow tracts, arrhythmias and increased neonatal mortality. With this heart tumour, there is risk of developing tuberous sclerosis complex, reported widely ranging from 50-90%.

Due to its rarity, this presentation aims to present two cases in which rhabdomyoma was detected in the intrauterine period with one case that developed into tuberous sclerosis in the postnatal period.

CASE1: Baby that was born in 38th week of gestation with fetal echocardiography at 36 weeks of gestation possibly observed a view consistent with a 10x0.9mm rhabdomyoma or myxoma associated with the ventricular wall from the lower end of the left ventricle. A patent foramen ovale was observed in the inter-atrial septum in the echocardiography that was performed on the first day postnatally. A 10.6x8.6mm posterior mass located towards the left ventricular apex was observed. A hyperechoic area was observed in the apex of the right ventricle. Echocardiography performed at the age of two, mild hyperechogenicity is observed in the region of a 12x7mm mass in the short axis on the posteriorly located inferior papillary muscle towards the left ventricular apex. There are 4 cafe au lait lesions smaller than 0.5cm that are observed in the patient. Tuberous sclerosis wasn't considered in the patient with the present findings.

CASE2: Baby that was born in 39th week of gestation. In fetal echocardiography performed at 37 weeks of gestation, a solid mass measuring 17x9.3mm was observed in the left ventricle, and above, a solid mass of 16x19mm in the widest part which included the left atrium was observed. In the echocardiography performed on the first day postnatally, the heart chambers were observed to be narrowed due to the mass. The ductus is narrowed, but remains open. A mass of 18x14mm in the right ventricle apex, 16x10mm in the left ventricular apex, multiple in the septum, 14x22mm in the left ventricle associated with the posterior wall, multiple measuring 4mm in the papillary muscle and 8x6mm in the apical septum were observed. Long QT

syndrome was observed during Holter examination. On physical examination, a 1x1 cm slightly hypopigmented macula was observed on the leg. The patient has a history of 2 convulsions. With these findings, the patient was considered to have tuberous sclerosis. In the last echocardiography performed at the postnatal 18th month, the heart chambers were observed to be narrowed due to the mass. The ductus is narrowed, but remains open. A 9x6mm mass in the right ventricular apex and a 6x10mm mass in the left ventricular apex was observed.

In conclusion, rhabdomyoma should be considered first in the differential diagnosis of hyperechogenic, well-defined cardiac masses observed in the intrauterine period. Since the development of other clinical findings may occur over time, these patients should be followed up for tuberous sclerosis.

Keywords: heart tumour, myxoma, rhabdomyoma, tuberous sclerosis

case 1



case 1.2



case 2



EP-067 [Obstetri Genel]

Evaluation of Management Pregnancies From Conception to Delivery to Puerperium as Risks Facing Newborns After COVID Pandemic, Tertiary Center Experiences

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INTRODUCTION: The impact of SARS-CoV-2 in pregnancy remains to be determined, and a concerted, global effort is required to determine the effects on implantation, fetal growth and development, labor, and neonatal health. Besides the direct impacts of the disease, a plethora of indirect consequences of the pandemic adversely affect maternal health, including reduced access to reproductive health services, increased mental health strain, and increased socioeconomic deprivation. In this study, we aimed to highlight areas for further research to minimize its impact for women and their children.

METHOD: This was a single tertiary center retrospective study that aimed to compare the COVID-19 pandemic effects on 922 pregnant patients and their babies. Patients who delivered in the Dokuz Eylül University Hospital Department of Obstetrics and Gynecology between June 2019 and December 2020 included the study. The patients divided into two groups, before COVID-19 pandemic and after COVID-19 pandemic. First group included patients who delivered on June 2019-February 2020, last 9 months before COVID-19 pandemic and second group patients were who delivered on March 2020-December 2020, first 10 months of COVID-19 pandemic. Pregnancies evaluated for obstetric histories, additional diseases which are related to pregnancy and comorbidities before pregnancy, laboratory profiles and why were hospitalized for delivery. Moreover, delivery room outcomes, fetal anomalies, and 3 months for follow up were compared.

RESULTS: When the comparison was made between before and after COVID pandemic, several important pieces of information were acquired about maternal and fetal outcomes, properties and pregnancy follow-up periods. Pregnancies which resulted from assisted reproductive techniques (ART) were significantly higher before COVID pandemics (9.1%) than after COVID pandemics (3.9%) ($p=0.003$). Respiratory symptoms included asthma, chronic bronchitis, chronic obstructive lung disease and other respiratory diseases which existed before pregnancy. Pregnant mothers who had a diagnosis for respiratory disease more often hospitalized at the delivery room after the COVID pandemics (0,5% to 2,8%) ($p<0.001$). Hospitalization etiologies for delivery room did not significantly differ among before and after COVID pandemics. Term pregnancies, uterine contractions, membrane rupture are the most common etiologies of both time periods. Hospitalization because of the COVID infection appeared by the pandemics. Hemoglobin concentration of patients was significantly decreased by the COVID pandemics from 11.98 ± 1.42 to 11.37 ± 1.65 ($p<0.001$). Cardiac, nervous, genitourinary, and gastrointestinal fetal malformation rates not significantly changed. However, fetal growth restriction rates significantly increased after the COVID pandemic (7%) when compared with before COVID pandemic rates (1,4%) ($p<0.001$). Moreover, multiple pregnancies also statistically significantly decreased after the COVID pandemics (from 5,9% to 1%) ($p<0.001$). Respiratory distress syndrome was statistically significantly increased from 3,9% to 8,4%

($p=0.005$). Hyperbilirubinemia, hypoglycemia, CPAP and intubation rates for the respiratory problems were not significantly changed by the COVID.

CONCLUSION: All aspects of pregnancy management from conception to delivery to puerperium as risks facing newborns are herein analyzed. It has posed problem to both the antenatal women and maternity care workers. The care and management of pregnant women is an essential service to identify high-risk mothers and also to have good pregnancy outcome for both mother and baby.

Keywords: Antenatal care, COVID-19 Pandemic, Pregnancy, Obstetric management

Table

Groups	Descriptions
Robson 1	Nulliparous, single cephalic, ≥ 37 weeks, in spontaneous labor
Robson 2	Nulliparous, single cephalic, ≥ 37 weeks, induced or prior C/S before labor
Robson 3	Multiparous (excluding prior C/S), single cephalic, ≥ 37 weeks, in spontaneous labor
Robson 4	Multiparous (excluding prior C/S), single cephalic, ≥ 37 weeks, induced or prior C/S before labor
Robson 5	Previous C/S, single cephalic, ≥ 37 weeks
Robson 6	All nulliparous breeches
Robson 7	All multiparous breeches (including previous C/S)
Robson 8	All multiple pregnancies (including previous C/S)
Robson 9	All abnormal lies (including previous C/S)
Robson 10	All single cephalic, ≤ 37 weeks (including previous C/S)

Robson Ten Group Classification System

Table 1

	Groups		Statistics	
	Group I n=564	Group II n=358	Value	p value
Age. (years)				
mean \pm sd	29.1 \pm 6.1	29.3 \pm 6.0	t=0.481	0.630
min-max	17.0-42.0	17.0-46.0		
Gravida	2 (1-7)	2 (1-7)	z=0.699	0.485
Parity	1 (0-5)	1 (0-5)	z=0.824	0.410
Curettage	0 (0-4)	0 (0-3)	z=1.859	0.063
Abortus	0 (0-5)	0 (0-3)	z=0.292	0.771
Assisted Reproductive Technologies	51 (9.1)	14 (3.9)	$\chi^2=8.964$	0.003
Pregnancy Complications n (%)				
None	360 (63.8)	196 (54.7)	z=2.744	0.007
Preeclampsia	25 (4.4)	25 (7.0)	z=1.592	0.102
Chronic Hypertension	6 (1.1)	11 (3.1)	z=1.955	0.055
Gestational Hypertension	6 (1.1)	6 (1.7)	z=0.761	0.553
Gestational Diabetes	50 (8.9)	26 (7.3)	z=0.881	0.461
Diabetes Mellitus	12 (2.1)	2 (0.6)	z=1.949	0.058
Thyroid Pathologies	38 (6.7)	37 (10.3)	z=1.875	0.062
Placental Pathologies	7 (1.2)	1 (0.3)	z=1.772	0.160
Invasion Abnormalities	4 (0.7)	1 (0.3)	z=1.772	0.160
Ablation of Placenta	3 (0.5)	0 (0)	z=1.772	0.160
Respiratory Diseases	3 (0.5)	10 (2.8)	z=2.458	0.007
Cardiac Disease	36 (6.4)	34 (9.5)	z=1.675	0.097
Autoimmune Diseases	12 (2.1)	6 (1.7)	z=0.503	0.808
Cholestasis	9 (1.6)	4 (1.1)	z=0.625	0.776

Table 1: Demographic Values of Patients

Table 2

	Group I n=564	Group II n=358	Test Value	p value
Hemoglobin Count	11.98 \pm 1.42	11.37 \pm 1.65	t=5.082	<0.001
Leucocyte Count	12.10 \pm 3.93	10.93 \pm 3.02	t=5.082	<0.001
Lymphocyte Count	1.50 \pm 0.90	1.80 \pm 0.70	z=5.147	<0.001
Platelet Count	225.5 \pm 89.0	232.0 \pm 86.0	z=0.105	0.917
Abnormal Liver Function Tests n (%)	37 (6.6)	21 (5.9)	$\chi^2=0.179$	0.680
Abnormal Kidney Function Tests. n (%)	6 (1.1)	5 (1.4)	$\chi^2=0.206$	0.758
Abnormal Coagulation Profile. n (%)	2 (0.4)	3 (0.8)	$\chi^2=0.949$	0.382

Table 2: Laboratory parameters of patients.

Table 3

	Groups		Test Statistics	
	Group I n=564	Group II n=358	Test Value	p Value
Hospitalization Indication. n (%)				
Contraction	155 (27.5)	111 (31.0)	z=1.145	0.264
Term Delivery	191 (33.9)	115 (32.1)	z=0.554	0.616
Membrane Rupture	135 (23.9)	73 (20.4)	z=1.274	0.226
Vaginal Bleeding	31 (5.5)	14 (3.9)	z=1.132	0.347
Decreased Fetal Movements	19 (3.4)	9 (2.5)	z=0.763	0.557
Flank Pain	5 (0.9)	0 (0.0)	z=2.258	0.163
Hypertension	18 (3.2)	19 (5.3)	z=1.157	0.123
Doppler Flow Abnormalities	10 (1.8)	2 (0.6)	z=1.786	0.142
COVID	0 (0.0)	15 (4.2)	z=3.969	<0.001
Gestational Delivery Week	38.4 (2.3)	38.4 (2.3)	z=0.727	0.467
Form of delivery. n (%)				
Vaginal	270 (47.9)	157 (43.9)	$\chi^2=2.910$	0.175
C/S	294 (52.1)	201 (56.2)		
Fetal Weight. (gr)	3150.0 (765.0)	3120.0 (810)	z=0.083	0.934
Preterm Delivery. n (%)	124 (22.0)	72 (20.2)	$\chi^2=0.431$	0.511
Fetal anomaly presence. n (%)	78 (13.9)	59 (16.5)	$\chi^2=1.192$	0.275
Detected Fetal Complications. n (%)				
Cardiac Abnormalities	13 (2.3)	6 (1.7)	z=0.680	0.637
CNS* Abnormalities	9 (1.6)	4 (1.1)	z=0.620	0.776
GUS* and GIS* Abnormalities	5 (0.9)	6 (1.7)	z=1.011	0.354
FGR *	8 (1.4)	25 (7.0)	z=3.770	<0.001
Multiple Pregnancy	33 (5.9)	4 (1.1)	z=4.180	<0.001
Intrauterine Demise	10 (1.8)	2 (0.6)	z=1.780	0.142
None	486 (86.2)	299 (83.5)	z=1.095	0.296

Table 3: Obstetric outcomes of newborns

*CNS: Central Nerve System Abnormalities, GUS: Genitourinary System Abnormalities, GIS: Gastrointestinal System Abnormalities, FGR: Fetal Growth Restriction

Table 4

Robson Score	Group I n: 564 (%61,2)	Group II n: 358 (%38,8)	p value
Robson 1 n: 129 (%14)	n: 65 (% 50,4)	n: 64 (% 49,6)	0,007
Robson 2 n: 143 (%15,5)	n: 94 (% 65,7)	n: 49 (% 34,3)	0,2
Robson 3 n: 182 (% 19,7)	n: 95 (% 52,2)	n: 87 (% 47,8)	0,006
Robson 4 n: 75 (% 8,1)	n: 50 (% 66,7)	n: 25 (% 33,3)	0,3
Robson 5 n: 205 (% 22,2)	n: 135 (% 65,9)	n: 70 (% 34,1)	0,1
Robson 6 n: 24 (% 2,6)	n: 16 (% 66,7)	n: 8 (% 33,3)	0,5
Robson 7 n: 14 (% 1,5)	n: 9 (% 64,3)	n: 5 (% 35,7)	0,8
Robson 8 n: 37 (% 4)	n: 33 (% 89,2)	n: 4 (% 10,8)	< 0,001
Robson 9 n: 10 (% 1,1)	n: 3 (% 30)	n: 7 (% 70)	0,05
Robson 10 n: 103 (% 11,2)	n: 64 (% 62,1)	n: 39 (% 37,9)	0,8

Table 4. Robson Ten-Group Classification System

Table 5

Neonatal Complication	Group		Statistical Analysis	
	Group I n=564	Group II n=358	Test Value	p value
RDS*. n (%)	22 (3.9)	30 (8.4)	$\chi^2=8.256$	0.005
Hyperbilirubinemia. n (%)	30 (5.3)	11 (3.1)	$\chi^2=2.601$	0.139
Hypoglycemia. n (%)	40 (7.1)	15 (4.2)	$\chi^2=3.288$	0.086
Intubation. n (%)	29 (5.1)	10 (2.8)	$\chi^2=2.982$	0.094
CPAP. n (%)	46 (8.2)	30 (8.4)	$\chi^2=0.015$	>0.999
APGAR Scores				
APGAR 1 st minute	9.0 (1.0)	9.0 (1.0)	z=0.078	0.938
APGAR 5 th minute	9.0 (1.0)	10.0 (1.0)	z=6.468	<0.001

Table 5: Fetal outcomes and 3 months follow up of baby

*RDS: Respiratory Distress Syndrome

EP-068 [Obstetri Genel]

Placenta increta, mimicking gestational trophoblastic disease and cesarean scar pregnancy, diagnosed eleven months after delivery

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There are many causes of postpartum hemorrhage, including traumatic hemorrhage from perineal incision, coagulation defects and uterine atony. Abnormal adherence of placenta, Cesarean scar pregnancy and gestational trophoblastic disease are other diseases that may cause of postpartum hemorrhage. Three of these clinical entities are associated with high rates of maternal morbidity and mortality. Here we report the case of a woman with a diagnosis of placenta increta that manifested as an unusual lower segment uterine mass, it caused prolonged but not catastrophic bleeding after delivery.

Keywords: Placenta increta, cesarean scar pregnancy, gestational trophoblastic disease

EP-069 [Obstetri Genel]

Otohisterektomi? Anterior And Posterior Wall Uterine Rupture Case Report

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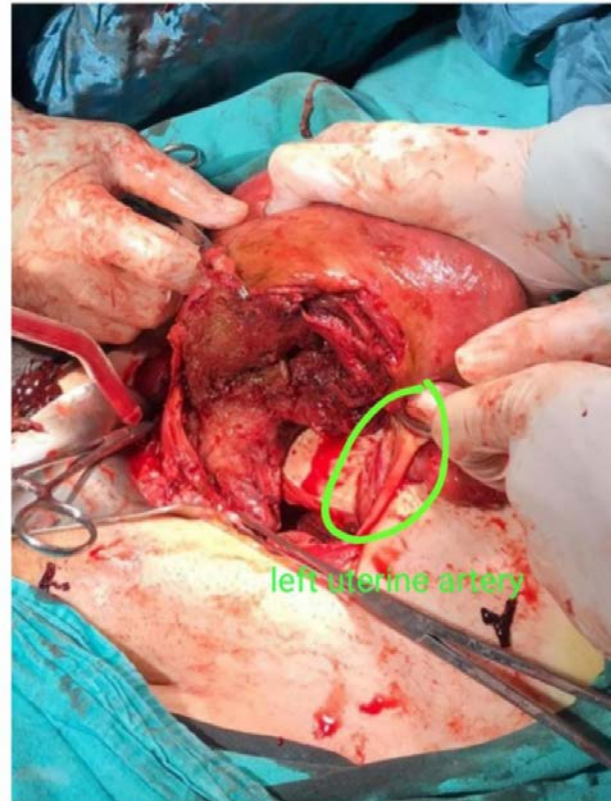
INTRODUCTION: A clear idea about determining the time of elective cesarean section could not have been established in cases with repeated one. In terms of neonatal outcomes, if there is no additional indication for preterm delivery, it is thought that elective cesarean section should not be planned before the 39th week. In the case of obstetric outcomes, there is no consensus on week of delivery for elective repeat cesarean sections unless there is an additional condition complicating pregnancy.

In a case, 38-year-old patient, g7p2a4, observed that no known comorbidity and no history of operation other than 2 cesarean section were found. When the gestational age was 38w3d, the patient applied to the pregnant outpatient clinic. Following that preoperative blood tests were performed for elective cesarean section, the patient was called again to make an appointment with the results on the same day. But in contrast, the patient applied to the pregnant outpatient clinic 8 days later (39w4d) to get the results and to make an appointment for elective cesarean section. She stated that pain had been present for 3 days in her outpatient clinic application and had felt good infant motions. The patient was pale, but his vital signs were extremely stable. As a result of nonreactive monitoring of NST, obtained before hospitalization, the patient was admitted to the delivery room. During the examination, performed in the delivery room, the heart rate was measured as 95/minute, the blood pressure was noticed as 110/70 mmHg and the body temperature was obtained as 36.5 °C.

The patient was transferred to emergency surgery due to the negative fetal heartbeat on USG and suspected uterine rupture. The abdomen was entered with a pfannenstiel incision. The uterus was ruptured from the anterior and posterior walls and in addition to the fetus, 2000cc of coagulated and defibrillated blood was detected visually in the abdomen. The fetus was removed and delivered to the waiting neonatal resuscitation team, However, it was accepted as exitus after the examination and intervention. The patient's uterus was noticed to rupture from the anterior and posterior walls along the lower segment, including the old incision line, the only tissue observed was the left uterine artery. Approximately 3cm length, including the uterine artery was not ruptured on the right side. total hysterectomy and bilateral salpingectomy were administered to the patient. Totally 4 units of red blood cells and 3 units of plasma were transfused to the patient with a hemoglobin value of 7.6 at the beginning of the operation. At the end of 4 days, she was discharged with a stable HB of 10.3 and vital signs.

Discussion and CONCLUSION: Further studies are needed in order to make the appropriate timing, considering neonatal outcomes and maternal complications, while planning an elective cesarean section in patients with 2 or more previous cesarean sections and not to encounter a picture such as uterine rupture that threatens the life of the fetus and mother.

Keywords: uterine rupture, repeated cesarean, pregnancy

ANTERIOR AND POSTERIOR WALL UTERINE**ANTERIOR AND POSTERIOR WALL UTERINE**

nst



nst

EP-070 [Obstetri Genel]

The Effect of COVID-19 Infection on the Necessity for Iron and Vitamin D Support in Pregnant Women

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AIM: The severity of the COVID-19 infection is not only due to the viral infection but also to the host response. However, in some patients, a dysfunctional immune response occurs, in which the cytokine storm is triggered. The present study aims to evaluate the iron and vitamin D support necessity of pregnant women who have experienced COVID-19 within 1 year and those who have never had it.

METHODS: Our single-center prospective study will be conducted in İzmir Çiğli Training and Research Hospital, Gynecology and Obstetrics outpatient clinic. After the first admission to the study between September 1st, 2022 and December 31st, 2022, the follow-ups will be performed on the 20th, 30th. and at 38th weeks of gestation. Data collection will be completed on 1st July 2023. All pregnant women who applied to our outpatient clinic, between the ages of 18-40, who had a history of COVID-19 in one year or who have never had COVID-19, and who agreed to participate in the study will be included in the study. Women with autoimmune diseases will be excluded.

RESULTS: It is planned to measure the fetal weight with fetal biometry, maternal weight, hemoglobin, hematocrit values, serum iron values, total iron binding capacity, ferritin and vitamin D levels at the 20th, 30th and 38th gestational weeks in patients who participated in the study. Follow-up forms will be filled in. A preliminary results were conducted on 14 pregnant women for this study. Only one of 7 pregnant women with COVID-19 is asymptomatic (14.3%). The asymptomatic pregnant woman has vitamin D deficiency with normal hemoglobin level. Symptomatic pregnant women had mild symptoms. Symptomatic pregnant women had vitamin D deficiency and four pregnant women had low hemoglobin levels (66.7%). The rate of having COVID-19 was higher in pregnant women with low hemoglobin values (57.1%). Except for one pregnant, 13 pregnant women had low monthly income (92.9%).

CONCLUSION: The study is in the proposal stage. Considering the COVID-19 pandemic conditions, we think that iron and vitamin D supplements are necessary and should be provided free of charge to all pregnant women.

Keywords: COVID-19, iron, pregnant women, vitamin D

EP-071 [Obstetri Genel]

Case Report: Reapplying Cerclage in Patients with Cerclage Presenting with Membrane Prolapse

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Aim: Women who have undergone transvaginal cerclage due to cervical insufficiency are at high risk of preterm delivery. Amniotic membrane prolapse is a poor prognostic factor in these patients. It often leads to second trimester loss or premature preterm delivery. Prolapse of membranes after cerclage is generally considered to be cerclage failure and often no further intervention is required. One of the possible interventions is to reapply the cerclage. There are inconsistent result in the literature about re-cerclage. In this poster we aimed to present four cases who had undergo second cerclage due to cerclage failure in our clinic..

Cases: We retrospectively analysed 4 patients who undergo re-cerclage in our clinics between 2020-2021 years. History indicated prophylactic cerclage was performed to all 4 patients at 14, 15, 13 and 15 gestational weeks, respectively. Second cerclage decision was made when prolapsed membranes and cervical funnelling was observed in the ultrasound during the follow-up. The re-cerclage was applied these patients at 24, 25, 24 and 20 gestational weeks. Three of these patients delivered at 36, 35 and 36 weeks of gestation however the fourth patient was diagnosed as preterm premature membrane rupture 3 days after the 2nd cerclage and termination decision was made due to patient's request. She aborted at 20 weeks of gestational age.

Conclusion: There are a few studies on reapplying the cerclage. There is no consensus on this issue in the literature. For instance, in a study conducted in 26 patients with short cervical length detected after the previous elective McDonald cerclage, it was determined that the gestational period was prolonged in women who had re-cerclage compared to those who did not. Another study reported two cases of ultrasound- indicated re-cerclage resulting in term pregnancy. However, not all of the case

series support recerclage. In another study, re-cerclage applied to 24 women with short cervical length after first cerclage failure reported that the re-applied cerclage did not improve the outcome of these patients.

In conclusion, if primary cerclage is complicated with failure, cerclage may be tried again in selected cases for the increased possibility of prolonging the pregnancy.

Keywords: cerclage, membrane prolapse, reapplying cerclage

EP-072 [Obstetri Genel]

A new challenge: Peripartum cardiomyopathy or Covid-19 induced cardiomyopathy in a Covid-19-infected woman: A case report from Turkey

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Introduction: The mortality rate of Coronavirus disease-19 (COVID-19) is estimated to be <1%, mostly due to severe acute respiratory syndrome and multi-organ dysfunction. Cardiovascular complications of COVID-19 have been reported as acute coronary syndromes, arrhythmia, myocarditis, and heart failure. There has been limited information about pregnant and post-partum women infected with COVID-19.

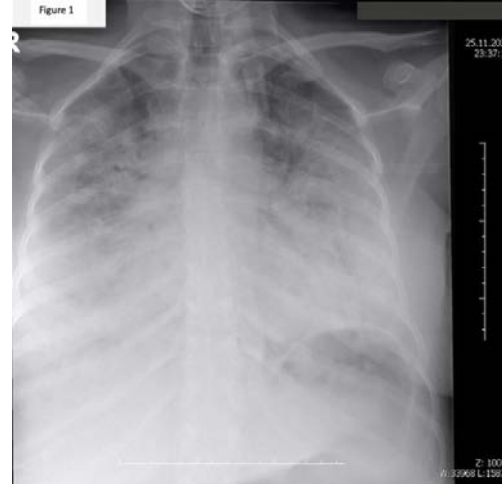
Case: Here, we present a case of COVID-19 infection in pregnancy complicated by peripartum cardiomyopathy. 31-year-old 36-week pregnant woman with confirmed COVID-19 positive polymerase chain reaction (PCR) test, was admitted to the emergency room because of shortness of breath. The oxygen saturation (SPO₂) was 90%. High-sensitive cardiac troponin T (hs-cTn) and other cardiac markers were normal. After admission to the pandemic ward, nasal oxygen and subcutaneous enoxaparin were given. She gave birth by caesarean section two days later and corticosteroid, ranitidine and favipiravir were started. Chest radiography revealed bilateral ground glass appearance (Figure 1). After her SPO₂ decreased to 80%, she was transferred to intensive care unit (ICU) and received invasive mechanical ventilation (IMV). Electrocardiography (ECG) showed sinus tachycardia without ST segment deviation. hs-cTn and N Terminal pro B type natriuretic peptide (NT-pro BNP) levels were elevated. Normal left ventricle (LV) diameters, ejection fraction (EF) rate of 40%, moderate mitral valve regurgitation (MVR), moderate tricuspid regurgitation (TR), mild LV diastolic dysfunction was detected by transthoracic echocardiography (TTE). Metoprolol, acetylsalicylic, ramipril and furosemide treatment was initiated. After receiving IMV eight days, the patient was extubated and transferred to the pandemic ward. Her chest X ray is shown in Figure 2. The patient was hospitalized for a total of 23 days. At her discharge SPO₂ was increased to 95%, TTE reported normal LV diameters, EF: 60%, mild MVR, mild TR, mild LV diastolic dysfunction. One month after the hospital discharge, the patient was evaluated at the outpatient clinic. She was asymptomatic on metoprolol, ramipril, enoxaparin and acetylsalicylic acid treatment. Her ECG and cardiac marker levels were within normal limits and TTE showed normal LV EF with minimal MVR and TR.

Discussion: A combination of direct viral injury and cardiac damage due to the host's immune response is thought to induce cardiomyopathy. SARS-CoV-2 enters cardiomyocytes via angiotensin-converting enzyme 2 (ACE-2). In a case series of patients with COVID-19, 7% of deaths were attributed to myocarditis with circulatory failure and 33% to cases in which myocarditis may have played a contributing role to the patient's demise. Cardiac troponin I levels are found to be significantly higher in patients with severe COVID-19-related disease compared to patients with nonsevere illness. Reports have suggested that acute cardiac injury including elevation of cardiac biomarkers to >99th percentile of the upper reference limit along with the electrocardiographic and echocardiographic abnormalities is highly prevalent in patients infected with COVID-19 and is associated with more severe disease and worse prognosis.

Conclusion: Recognition, differential diagnosis and management of fulminant myocarditis is challenging. Early cardiac magnetic resonance imaging (MRI), serial ECG, cardiac biomarkers and TTE should be performed. Appropriate treatment such as inotropes and IMV should be given according to the patient's clinical condition.

Keywords: COVID-19, peripartum cardiomyopathy, pregnancy

Figure 1



Chest x-ray revealed bilateral ground glass appearance

Figure 2



Chest x-ray after the patient's transfer from ICU to the pandemic ward

Tablo 1: Summary of COVID-19 related PPCMP case reports in the literature

Authors	Our case	Juusela A, Nazir M, Gimovsky M.	Juusela A, Nazir M, Gimovsky M.	De Vita S, Ippolito S, Caracciolo MM.	Bhattacharyya P. Attri PK, Farooqui W.	Tilve A, Mahajan NN, Pandey A, Jnanananda B, Gadekar S.	Tilve A, Mahajan NN, Pandey A, Jnanananda B, Gadekar S.	Gulersen M, Staszewski C, Grayver E, Tam HT, Gottesman E, Isseroff D, Rochelson B, Bonanno C.
Age (years)	31	45	26	35	32	26	21	31
Medical history	Unremarkable	Gestational diabetes, obesity	Obesity, polycystic ovary syndrome	Unremarkable	Gestational hypertension	PPCMP	PPCMP	Class 1 obesity and childhood asthma
Confirming the criteria of PPCMP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Echocardiographic findings	EF 40% with global hypokinesis, moderate MR and moderate TR	EF 40% with global hypokinesis	EF 40%–45% with global hypokinesis	EF 20% with global hypokinesis, dilated LV, moderate MR, mild RV dilation and dysfunction, and pericardial effusion (10-mm), a 10-mm thrombus attached to the inferior portion of the LV apex	EF 38% with hypokinetic mid and aknetic apical LV segments and hypercontractile basal segments with prominent apical ballooning typical of takotsubo cardiomyopathy	Dilated LV, severe generalised LV hypokinesia, LVEF 20 %, LV diastolic dysfunction, LV non-compaction, Mild MR, Mild PAH, Mild TR, RVSP 48mmhg	Global LV hypokinesia, LVEF of 30-35 %, LV non-compaction, Mild MR, Moderately Compromised LV systolic function	TTE revealed severe global bi-ventricular dysfunction with a trace pericardial effusion.
Gravida/para	2/1	4/2	3/1	1/0	1/0	3/2	1/0	Multiparous woman
Time of Covid diagnosis	36th week of pregnancy	39th week of pregnancy	33rd week of pregnancy	4 weeks after delivery	38th week of pregnancy	36th week of pregnancy	38th week of pregnancy	24th week of pregnancy
PPCMP and DCMP history	No	No	No	No	No	PPCMP	PPCMP	No
Family history of PPCMP, DCMP and sudden cardiac death	No	Unknown	Unknown	No	Unknown	Unknown	Unknown	Unknown
Time of heart failure diagnosis	36th week of pregnancy	39th week of pregnancy	33rd week of pregnancy	4 weeks after delivery	38th week of pregnancy	Unknown	Unknown	28th week of pregnancy
Cardiac MRI	Performed three months after the hospital discharge and showed no evidence of myocardial injury, however pericardial hyperenhancement was significant	No	No	Performed the day after admission and showed an oval-shaped, enlarged LV with normal thickness; diffuse hypokinesis of LV walls with reduced systolic function (LVEF 17%). LV apical thrombus was confirmed. The RV was enlarged with diffuse hypokinesis and reduced contractile function (RVEF 19%).	No	No	No	
Treatment	Metoprolol, ramipril, enoxaparin, acetylsalicylic acid, furosemide, antibiotics, favipiravir, mechanical ventilation	Magnesium sulfate, furosemide, methylprednisolone, hydroxychloroquine, mechanical ventilation, successful cardiopulmonary resuscitation, norepinephrine, tocilizumab	Fluid restriction, supplemental oxygen via nasal cannula, ceftriaxone, azithromycin, metoprolol	Enoxaparin, furosemide, ethacrynic acid, spironolactone, bisoprolol, ramipril	Bisoprolol, enoxaparin, antibiotics, aspirin, atorvastatin	Furosemide, bisoprolol, isosorbide dinitrate, digoxin	Carvedilol, ramipril	Ceftriaxone, pain medication, dexamethasone, mechanical ventilation, dobutamine and vasopressor support, intravenous immunoglobulin, intravenous unfractionated heparin, intravenous magnesium, hydralazine
Outcome of mother	Three months after the hospital discharge, echocardiography and laboratory findings were completely normal.	She remains intubated and ventilated in the intensive care unit and is arousable and moving all 4 extremities, with SpO2 of 96%, continuance of norepinephrine drip at 20 mcg/min, 100-mg methylprednisolone IV daily, and 400-mg hydroxychloroquine orally daily.	The patient is stable on day 7 of hospital admission.	Repeat echocardiography on day 4 was stable with reduction in the severity of MR, decrease in pericardial effusion, and recovery of RV function. Unchanged apical thrombus was confirmed. No arrhythmias were noted during continuous ECG monitoring. Troponin values remained stable (37-29 U/L). Chest radiography showed decrease of pleural effusion and regression of pulmonary congestion.	Repeat TTE on day 13 on transfer to the cardiology ward showed the normalisation of the LV regional wall motion abnormalities and significant improvement of EF% (51%) Subsequent CAG on day 14 revealed non-obstructive CAD involving the left anterior descending artery. She was discharged from the cardiology ward after full recovery on day 16 with aspirin, atorvastatin and bisoprolol.	After 13 days she was discharged from the hospital.	After 5 days she was discharged from the hospital.	She was extubated 1 day postpartum and advanced on all postoperative milestones by postoperative day 2. She received IV immunoglobulin and high-dose corticosteroids for a total of 5 and 10 days, respectively, and was discharged home on postoperative day 7. Normal cardiac function was visualized on echocardiogram and MRI before discharge.
Outcome of newborn	Alive	Alive	Alive	Alive	Alive	Alive	Multiple congenital anomalies, poor APGAR, neonatal intensive care unit admission, neonatal death	Newborn SARS-CoV-2 PCR test results using nasopharyngeal swab specimen were negative, and he remains in the neonatal intensive care unit with complications related to prematurity.

APGAR: Appearance (skin color), Pulse (heart rate), Grimace (reflex irritability), Activity (muscle tone), and Respiration; CAD: Coronary arterial disease; CAG: Coronary angiography; DCMP: Dilated cardiomyopathy; ECG: Electrocardiogram; EF: Ejection fraction; IV: Intravenous; LV: Left ventricle; MR: Mitral regurgitation; MRI: Magnetic resonance imaging; PAH: Pulmonary arterial hypertension; PCR: Polymerase chain reaction; PPCMP: Peripartum cardiomyopathy; RV: Right ventricle; RVSP: Right ventricular systolic pressure; TR: Tricuspid regurgitation; TTE: Transthoracic echocardiography

EP-073 [Obstetri Genel]

Zavanelli maneuver in sacral teratomaYusuf Başkiran¹, Pınar Kadiroğulları²¹Van Eğitim ve Araştırma Hastanesi²Acıbadem Üniversitesi Atakent Hastanesi

AIM: The Zavanelli maneuver is a maneuver used in nonprogressive shoulder dystocia and preferred as a last resort. In our case, we present a severe dystocia case in which management was extremely difficult with the Zavanelli maneuver and emergency cesarean section

CASE: Our case was a 27-year-old patient who had 6 pregnancies, 4 normal vaginal deliveries, and was an immigrant and therefore never applied for pregnancy follow-up. The patient applied to the gynecology emergency department due to pain and was taken to the delivery table because of the detection of cervical full dilatation and effacement in the vaginal examination. Vertex was at level +2 and amnion posh was opened. Since the patient and his relatives did not speak Turkish, the anamnesis could not be taken clearly. The fetal head was delivered 5 minutes after the patient's admission to the emergency room. Emergency delivery maneuvers were applied to the patient who had shoulder dystocia. The patient, who was not born with Mc Roberts and suprapubic pressure, was performed a wood maneuver by the senior doctor and the shoulder was saved. However, the fetal abdomen could not be removed after the shoulders were removed. In the emergency ultrasonography, it was suspected that there might be a mass in the abdomen of the fetus. Meanwhile, a fetal heartbeat was not observed in the baby who remained in the birth canal. Despite the rotations and traction, the fetus did not deliver and the zavanelli maneuver was started. Nitroglycerin infusion was given. The arms were flexed again and sent inside. The shoulders were sent in, first the lower shoulder, then the upper shoulder. Afterward, the fetus in the occiput posterior was turned to the occiput anterior and pushed in with flexion and internal rotation. The fetus was removed with Pfannenstiel incision and Kerr incision. Fetal heart rate was negative. Despite neonatal resuscitation, fetal heartbeat could not be obtained and the fetus was reported as ex. In the evaluation made by the newborn physician, 14 cm sacral teratoma were diagnosed.

DISCUSSION: The Zavanelli Maneuver is the pushing of the fetal head back towards the pelvis in order to enable the fetus to be delivered by cesarean section. The procedure for this maneuver involves the complete reversal of all the basic movements of birth. It is a maneuver that can be successful with early and systematic implementation.

Conclusion: A birth that requires the Zavanelli maneuver can be difficult. The fetus may become worse due to the complete reversal of all cardinal movements. It is recommended when internal and external manipulations fail. Many clinicians are not adequately trained in how to perform the maneuver and are unfamiliar with the steps involved, which can lead to reluctance and delay in initiating the maneuver. Although the zavanelli maneuver, whose name is mentioned in many books and articles, may seem impossible, it should be known that it can be performed in case of early intervention and then the patient can be taken to the cesarean section in a controlled manner.

Keywords: Dystocia, Maneuver, Sacral teratoma, Zavanelli**fetal arm and fetal abomen***first arm and abdomen send again***fetal head and abdomen***position fetal head and abdomen***fetal sacral teratoma***fetal sacral teratoma (14 cm)***occiput anterior fetüs***occiput posterior fetus >>>occiput anterior*

EP-074 [Obstetri Genel]

Laparoscopic Abdominal Cerclage in a Case with a Failed Cervical Cerclage History

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Samsun

Introduction: In cervical insufficiency cases where vaginal cerclage has been tried before but the continuation of pregnancy could not be achieved abdominal cerclage is a very effective method. Abdominal cerclage has superior aspects to vaginal cerclage. These; It can be placed at a higher level (at the level of the internal cervical os) than the vaginal cerclage and there is no foreign body in the vagina that may be a source of infection. Looking at the literature, it is seen that abdominal cerclage is more successful than vaginal cerclage. In this case report, we aimed to present the laparoscopic cervicoistmic cerclage surgery that we performed in our patient who had previously unsuccessful vaginal cerclage application in our hospital.

CASE: The 31 years old patient, who was G:4 P:1 A:2 Y:1, had a history of fetal loss at the 14th and 16th weeks of pregnancy. The patient, who underwent vaginal cerclage operation at the 12th gestational week in 2020 due to known 2nd trimester losses, aborted after early rupture of the membrane at the 20th week in the on going process. The patient was re-evaluated because of the current history. No additional features were observed in the examination findings of the patient. Laparoscopic cervicoistmic cerclage was planned for the patient on 17.03.2021 by us. During the operation, the bladder peritoneum was opened and the bladder was rejected. The cerclage sutures were taken to the abdomen, at the level of the internal cervical os, over the sacrouterine ligaments, and passed from back to front, between the uterine vessels and the cervical stroma. Peritoneum was sutured. After an uneventful operation, our patient became pregnant spontaneously in the post-operative 3rd month. The patient, whose antenatal follow-up was continued in our clinic, was delivered by cesarean section at 37 weeks of gestation with the indication of "Painful Repeated Cesarean Section". The cerclage suture was left in place because the patient had fertility expectations during the operation.

DISCUSSION: When we looked into studies, it is observed that abdominal and laparoscopic cerclage applications are more successful in preventing preterm labor and reducing second trimester fetal losses as a result of cervical insufficiency in which repeated unsuccessful cervical cerclage is applied. In line with these findings, considering both success and morbidity in treatment-resistant cervical insufficiency cases, laparoscopic cervicoistmic cerclage should be chosen as the first-line treatment.

Keywords: Cervical insufficiency, cerclage, laparoscopic abdominal cerclage, cervicoistmic cerclage.

Laparoscopic abdominal cerclage



EP-075 [Obstetri Genel]

Peripartum Cardiomyopathy: Case Report

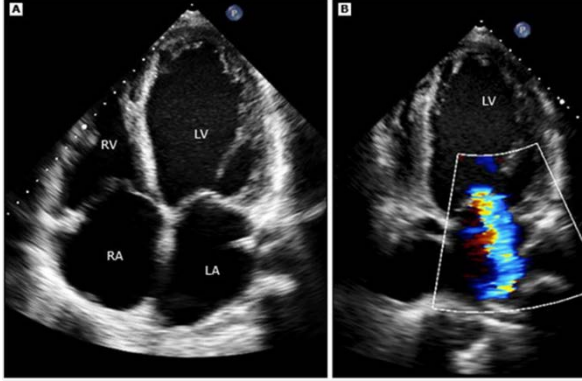
Ece Ermin, İsmail Akif Tüfekcioğlu, Berkay Soyupak, Orhan Şahin,
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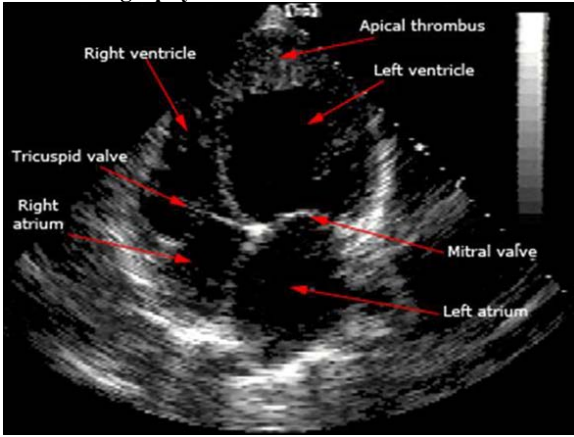
Peripartum cardiomyopathy (PPCM) is defined as the development of systolic heart failure towards the end of pregnancy or in the months following pregnancy with left ventricular ejection fraction (LVEF) generally less than 45 percent in the absence of another identifiable cause of heart failure. Risk factors include multiple gestation, age greater than 30 years, African descent, a history of preeclampsia, eclampsia, or postpartum hypertension, maternal cocaine abuse, long-term (>4 weeks) oral tocolytic therapy with beta adrenergic agonists such as terbutaline. In this case report, we analyzed a triplet pregnant patient who were followed up and delivered at 31 weeks of gestation. Patient had complaints of dyspnea and fatigue as soon as after birth. On cardiology consultation, left ventricle systolic dysfunction was observed in the examination which was performed by cardiologist, other diagnoses were ruled out such as pulmonary embolism, COVID-19 infection and the patient was diagnosed with peripartum cardiomyopathy. Three months later after birth, complete remission was reported by a cardiologist. Peripartum cardiomyopathy should be considered in the differential diagnosis of a patient who refers dyspnea, has multiple pregnancy and is postpartum. Etiology is unknown but peripartum cardiomyopathy has lethal potential for pregnancy. Rapid diagnosis increases survival rate.

Keywords: Cardiac disease, dyspnea, multiple pregnancy, peripartum cardiomyopathy, postpartum

Echocardiography



Echocardiography 2



EP-076 [Obstetri Genel]

Pregnancy and Birth Management in Patient with Ventriculoperitoneal Shunt: Case Report

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Shunt failure complicates 25 to 50 percent of pregnancies in women with ventriculoperitoneal (VP) shunts. Symptoms include confusion, lethargy, nausea, vomiting, headache, nystagmus and cranial nerve palsies. These symptoms require immediate evaluation, neuroimaging and neurosurgery consultation. A 37 years old, gravida 2 parity 2, female patient, who had been operated for a ventriculoperitoneal shunt 3 years ago with the diagnosis of hydrocephalus, applied to a tertiary healthcare institution with the request of pregnancy again. There was no medical contraindication for the patient to become pregnant. No abnormality was observed in the outpatient clinic visits. A healthy child was delivered by cesarean section at 37 weeks of gestation. The flow of active cerebrospinal fluid from the peritoneal end of the ventriculoperitoneal shunt was observed. The use of ventriculoperitoneal shunts is not considered the most common and most effective method for the treatment of hydracephalus, but it relieves the symptoms of hydracephalus and stops its progression. Today, since this method improves the prognosis, most of the patients can reach the fertile period and the patients can have a child. Increasing intra-abdominal pressure

and uterine size during pregnancy may cause decreased shunt flow and loss of function of the shunt. Pregnant women with a VP shunt need careful management and close follow-up in the pre-pregnancy, prenatal, natal and postnatal period.

Keywords: Birth, hydrocephalus, pregnancy, ventriculoperitoneal shunt

EP-077 [Obstetri Genel]

Necessity of Using Oral Antianemic Drug in Pregnancy and Puerperium

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INTRODUCTION: Anemia in pregnancy was defined as follows, hmg<11g/dl in 1.trimester, hmg <10.5g/dl in 2.trimester, hmg <11g/dl 3.trimester, hmg <10 g/dl in postpartum period. Iron requirements increase during pregnancy, to accommodate fetal and placental needs, expansion of the maternal RBC mass and blood loss during delivery. Iron deficiency anemia in pregnancy is common in Turkey. Anemia and iron deficiency in pregnancy affect both neonatal and maternal morbidity, including preterm birth, perinatal mortality, postpartum hemorrhage, preeclampsia, maternal mortality and fatigue.

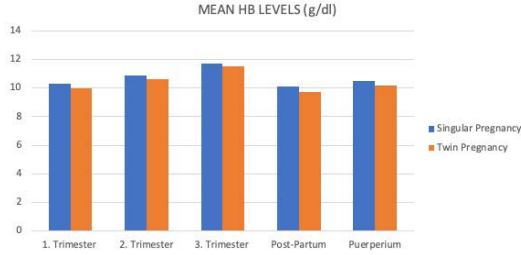
OBJECTIVES: We sought to define Hb levels in pregnancies taking antianemic drugs who were followed up and delivered at Zeynep Kamil Women's and Children's Diseases Training and Research Hospital. **METHODS:** we randomly choiced 100 pregnant who had come to our hospital for a checkup in each trimester of pregnancy. We looked at the hmg values of patients in each trimester, postpartum first day and the first postpartum month. We collected informations related with patients from Healty Information System Database of our hospital over the last one year. Than, we analysed all the data in the SPSS Statistics 20 programme.

RESULTS: 12% of the pregnant women in our sample were twin pregnant and 88% were single pregnant. The average Hb levels of single and twin pregnant women are also shown in the first graph. Mean Hb lives of singular pregnancy: 10.3 g/dl in 1. trimester, 10.9 g/dl in 2.trimester, 11.7 g/dl in 3.trimester, 10.1 g/dl in postpartum first day and 10.5 g/dl in postpartum first month. Mean Hb lives of twin pregnancy: 10.0 g/dl in 1. trimester, 10.6 g/dl in 2.trimester, 11.5 g/dl in 3.trimester, 9.7 g/dl in postpartum first day and 10.2 g/dl in postpartum first month. With the effect of hemodilution in twin pregnancies, the average hemoglobin values are lower than in single ones. Percentages of anemia in our patients are shown in second graph. Percentages of anemia in our patients are %57 in 1.trimester, %51 in 2.trimester, %45 in 3.trimester, %51 in postpartum first day and %42 in postpartum first month. In this study, it was revealed that routine oral antianemic use during pregnancy reduces anemia during pregnancy and puerperium.

CONCLUSION: Iron deficiency anemia is very common in pregnancy. Iron supplementation increases Hb levels of pregnant women and postpartum women. Routine oral iron supplementation should be recommended to all pregnant women.

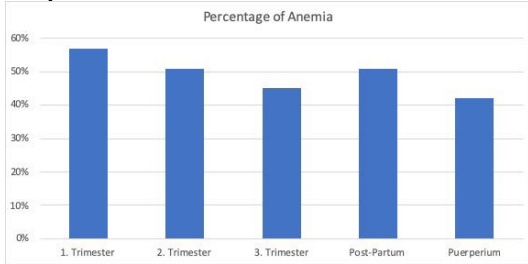
Keywords: anemia, antianemic drugs, pregnancy, hemoglobin level

Graph 1



Mean Hb Levels (g/dl)

Graph 2



Percentage of Anemia

EP-078 [Obstetri Genel]

Case report: Ovarian serous cystadenofibroma detected incidentally during cesarean section

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INTRODUCTION: As a result of the widespread use of ultrasonography (USG), it has led to an increase in the number of pelvic masses detected during pregnancy. Serous cystadenofibroma is a relatively rare subtype of the serous cystadenoma, class of benign epithelial tumors of the ovary. We aimed to present a case of ovarian serous cystadenofibroma that we detected incidentally during the cesarean section.

CASE: A 38-year-old patient, who had 5 vaginal deliveries and 1 abortion before, was applied on 27.11.2021. It was found that she came for only two check-ups, at the 6th week and the 26th week of pregnancy. In the USG performed at 6th week, no abnormalities were seen. It was determined that no first-trimester screening, quadruple screening or second-trimester ultrasound had been made. In the USG performed at 26th weeks, a singleton live pregnancy compatible with 25 weeks of fetal measurements, normal amniotic fluid index (AFI), and posteriorly located placenta was observed. When the 50 g OGTT test performed on the patient was found to be abnormal, 100 g OGTT was performed and it was found to be abnormal as well. A diet program was recommended by the endocrinologist, but the patient did not follow up afterwards and did not fully comply with the diet. In the patient's application dated 27.11.2021, a live singleton pregnancy with a posteriorly located placenta and with adequate AFI was reported in USG. The estimated fetal weight was measured as 4500gr. In the vaginal examination, there is a 2

cm dilatation and 10% effacement in the cervix. Rupture of membranes and amniotic fluid flow from the cavity was seen. The patient was taken to cesarean section on 21.11.2021 at 23:33 because of the suspicion of a fetal macrosomia. 4050 gr alive male baby was delivered. While in the intraoperative observation, the left adnexal area was observed naturally, although a multilobule and heterogeneous solid-cystic mass of approximately 13x10x3.8 cm was detected in the right adnexal area, adjacent to the right ovary. The mass excision was performed. The pathology result was cystadenofibroma, serous cystadenoma.

CONCLUSION: The incidence of cystadenofibromas is rare (1-8%) and rarely malignant.

Asymptomatic patients make up 25% of cases. Cystadenofibroma may give the appearance of a more serious formation than it is because it may contain solid components and thick septations in its structure. As in our presented case, in patients who are asymptomatic, not followed regularly and don't have previous USG data to inform us about an existing adnexal mass, care should be taken more seriously. Pelvic area and abdominal cavity exploration during cesarean section should be done well in terms of a possible mass. Although the size of the mass in our case was 13 cm, it should be kept in mind that cystadenofibroma may be smaller and may require detailed exploration, and may rarely be malignant.

Keywords: cesarean, cystadenofibroma, ovary

cystadenofibroma



Ovarian serous cystadenofibroma detected incidentally during cesarean section

cystadenofibroma 2



EP-079 [Obstetri Genel]

Case Report: A Laparoscopic Ovary-Sparing Excision in an Ovarian Ectopic Pregnancy

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Ectopic pregnancy can be defined as implantation outside of the uterine cavity. Risk factors can be listed as pelvic inflammatory disease(PID), prior tubal surgeries, smoking, history of ectopic pregnancy, use of assisted reproductive techniques and in vitro fertilization (IVF). The majority of extrauterine pregnancies are of tubal origin. Other locations of ectopic implantation such as ovary, prior incision scar, peritoneum, cervix are rarely seen. Ovarian ectopic pregnancy(OEP) is one of the rarest types of implantation. The incidence of OEPs varies between 1/2,000 -1/60,000 and constitutes 3% of all ectopic pregnancies. Due to its rarity, we aimed to present a case of OEP that we operated laparoscopically with an ovarian-sparing approach in our clinic.

Case: A 35-year-old patient, with a previous history of two cesarean sections, who had a delay in their menstrual cycle for approximately 7 weeks, applied to the emergency service with the complaint of vaginal spotting. On physical examination, there was minimal tenderness in the lower quadrants of the abdomen. The patient's vital signs are noted as follows: body temperature was 36.7°C, blood pressure was 100/60mm/Hg and pulse was 86bpm. The laboratory results show the hemoglobin value as 12.3mg/dl and B-HCG value as 9.906 mIU/ml. In the transvaginal ultrasound evaluation, an endometrial 13 mm intrauterine gestational sac was not observed as expected, but a pregnancy with fetal heartbeat was observed in the left ovarian area. The patient was informed about the ectopic pregnancy and the patient's written consent was obtained and the operation was planned. The uterus, bilateral tubas and right ovary were assessed as normal in the initial laparoscopic exploration. There was minimal intra-abdominal hemorrhage. An ectopic pregnancy of approximately 3 cm in the upper part of the left ovary was excised. The operation was terminated after proper evaluation and control of hemorrhage sites. The extracted material that was sent for pathological evaluation and pathology result was compatible with an ectopic pregnancy. Postoperatively, the patient presented with no additional complaints or symptoms and was discharged on first day.

Conclusion: Ectopic pregnancy is an important health problem as it constitutes to 10% of maternal deaths. For this reason, ectopic pregnancy should be an initial consideration in patients with BHCG positivity in the early period with complaints of pelvic pain and spotting. Treatment consists of medical and surgery according to the patients status. If surgery is choosen for treatment L/S should be the first choice. Ovarian, one of the rarest type of ectopic pregnancy can be effectively treated with L/S.

Keywords: ectopic pregnancy, ovarian ectopic pregnancy, laparoscopic

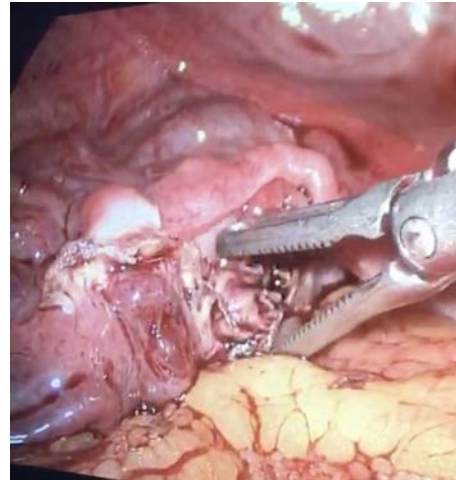
endometrial thickness ultrasound



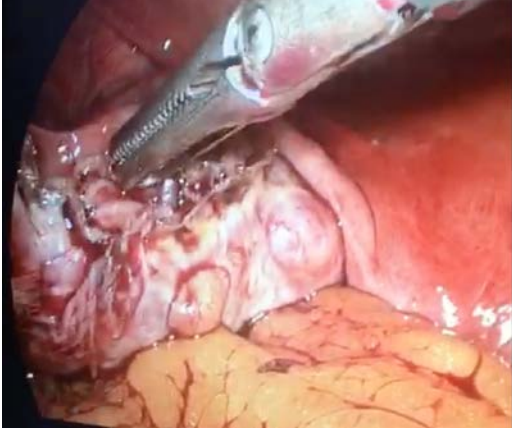
fetal heartbeat



over



over 2



pathology material



ovarian ectopic pregnancy material

EP-080 [Obstetri Genel]

A Giant Myxoid Leiomyoma of Broad Ligament Incidentally Detected During Cesarean Section

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INTRODUCTION: The incidence of adnexal mass detected during cesarean section varies between 1/154 -1/447. Leiomyomas are benign tumors that often originate from the myometrium. Myxoid leiomyomas is a rare specific subtype. Here, we present a rare case of myxoid leiomyoma located in the broad ligament and incidentally detected during cesarean section.

CASE: A 31-year-old primigravid woman, who did not know her last menstrual period and had no follow-up during pregnancy, applied to our emergency service with uterine contractions. Ultrasonographic measurements of fetus were compatible with 38 weeks. The patient underwent emergency cesarean section with the indication of fetal distress. During intraoperative exploration a bright, smooth-surfaced, brown, approximately 30x25 cm cystic mass was observed, which was

not related with the uterus. In histopathological evaluation, a spindle cell tumoral structure with loose myxoid areas was reported. In the immunohistochemical study, desmin, SMA and caldesmon were positive and reported as myxoid leiomyoma with hydropic degeneration.

DISCUSSION: The most common histopathological diagnoses of adnexal masses detected incidentally during cesarean section are functional cysts, mature cystic teratoma and cystadenomas. Leiomyomas are the most common pelvic tumors in women. They are benign monoclonal tumors and originate usually from the uterus, but rare cases have been reported in cervix, vaginal canal, broad ligament, and ovaries. It has been suggested that leiomyomas which are adherent to broad ligament originate from the subperitoneal connective tissue of the ligament. Myxoid and calcific degenerations are the most common form of degeneration seen in broad ligament fibroid. Therefore, it can be confused with adnexal masses clinically and radiologically. While avoiding additional surgical intervention in order not to increase morbidity during cesarean section, it should be noted that the final decision can only be reached histopathological examination in such suspicious masses.

Keywords: Myxoid Leiomyoma, adnexal mass, pregnancy

Myxoid Leiomyoma



A giant (30x25 cm, 2091gr) myxoid leiomyoma of broad ligament incidentally detected during cesarean section

EP-081 [Obstetri Genel]

First-trimester miscarriage rate during the second wave of COVID-19 pandemic in Turkey

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Aim: The number of researches demonstrating a difference between first and second-wave miscarriage rates remains limited. We compare the first-trimester miscarriage rate in Turkey during the first and second

waves of the COVID-19 pandemic.

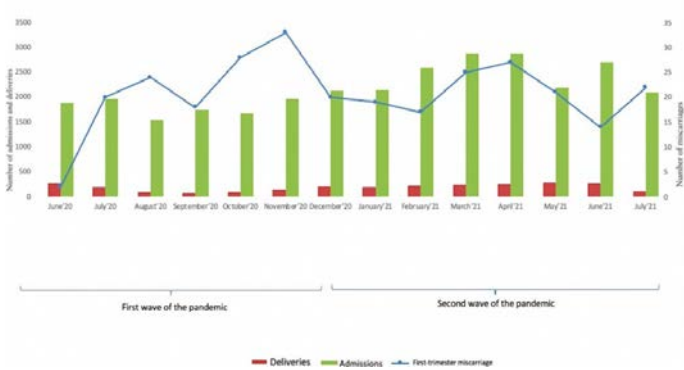
Methods: We conducted a retrospective cohort study comparing the rate of first-trimester miscarriage during the pre-pandemic period, the first and second pandemic waves between two epochs, 2018 and 2021, at Ankara University Hospital. During the total study period, the total number of deliveries, miscarriages, and symptomatic patients for COVID-19 and the total number of pregnant patients who applied to our hospital and their comparison were assessed. Results were reported as Odds rate (OR) and 95% confidence intervals (CI).

Results: During the first and second waves of the pandemic, a total of 30438 pregnant women were admitted to our unit. In the symptomatic SARS-CoV-2 positive patients, there was a statistically significant difference between the two waves ($p < 0.001$). Nevertheless, the first-trimester miscarriage rate (per 1000 deliveries) was not statistically significant different during the second wave compared to the first wave of the pandemic (89.9 vs. 125.5; OR:1.43, 95% CI 0.92-1.49, $p > 0.05$). When we compare the rate in the second wave with the pre-pandemic period, there is no significant difference between the two epochs (OR: 1.04; 95% CI 0.82-1.25, $p > 0.05$).

Conclusion: Our results demonstrated no significant increase in the first-trimester miscarriage rate between the first and second waves of the pandemic in Turkey. Due to the limitations of our study, retrospective design, and single-center setting, multicenter studies with larger samples are needed to determine the second wave of the pandemic's effect on pregnancy outcomes and the first-trimester miscarriage rate.

Keywords: COVID-19, Abortion, Pandemic, Incidence

First-trimester miscarriage during first and second waves of the pandemic



EP-082 [Obstetri Genel]

A case report: bilateral congenital choanal atresia

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Congenital choanal atresia is the most common congenital nasal anomaly in which the relationship between the nasal cavity and nasopharynx is impaired as a result of unilateral or bilateral complete obstruction of the nasal aperture posterior. Choanal atresia is encountered with a frequency of 1/5000-8000. It is more common in girls, mostly seen as unilateral, and familial predisposition was found in 1/5 cases. Bilateral atresia presents with life-threatening asphyxia at birth, while unilateral atresia usually remains undetected and develops with advancing age. In order to emphasize the importance of considering bilateral choanal atresia in the differential diagnosis of severe respiratory distress in newborns, we will be sharing with you a case with severe polyhydramnios, which we followed up in our tertiary center clinic. Gravida 3 Parity 2 patient who was 33 weeks and 1 day old pregnant according to his last menstrual period, was referred to our clinic due to polyhydramnios and FADS and was examined by our perinatology clinic. Amnion fluid index (AFI) was 14 cm in the deepest single pocket, and severe polyhydramnios was observed. Cardiac examination revealed no features, fetal face was normal, stomach pocket was small. There was no consanguineous marriage between the parents who did not have the antenatal screening tests, and there was no history of chronic and genetic diseases in the mother. Genetic tests were recommended to the family, but the family stated that they did not want to have it done. Blood glucose monitoring was recommended because a single value was high in the 100gr OGTT which was performed in an external center. It was observed that blood sugar follow-ups were regulated. At the time of 37 weeks and 1 day old pregnancy, patient applied to us due to water leakage and was hospitalized with the preliminary diagnosis of rupture of membranes. Cesarean section was decided for the patient with the indication of fetal distress. A live male baby, 48 cm in length and 2910 grams in weight, was delivered with Apgar score of 1'7 5'9.

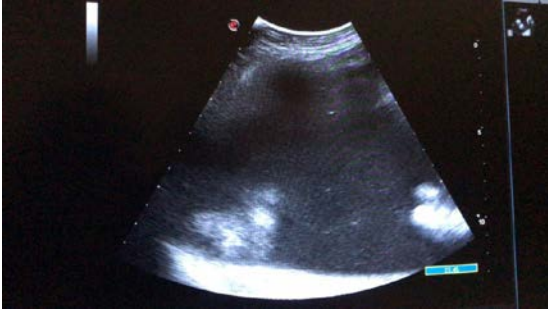
In the examination of the baby, who was evaluated by the neonatal team after birth, it was observed that the baby was cyanotic and the nasogastric tube did not pass through the bilateral nasal cavity. Bilateral choanal atresia was observed when viewed with a Flexible rhinoscope. In the Paranasal Sinus Computerized Tomography examination performed on the baby, an appearance compatible with obstruction in the posterior passage in the bilateral nasal region / bilateral choanal atresia were detected. Abdominal and color Doppler ultrasound performed on the baby after birth did not reveal any pathological features. Endoscopic bilateral choanal atresia operation was performed to the baby by the otorhinolaryngology clinic. The baby and mother are discharged and they continue to come to their routine check-ups. Choanal atresia is a serious condition that needs intervention when it is bilateral. With the development of medical imaging systems it is easily diagnosed and, endoscopic nasal surgeries are applied safely.

Keywords: atresia, choanal, polyhydramnios, ultrasound

after birth



polihidramnios



mide cebinin yokluğu



EP-083 [Obstetri Genel]

Pregnancy with pelvic organ prolapseMetin Şentürk¹, Hürrem Sultan Ataç Şentürk²¹Özel Nefes Hastanesi²Kastamonu Eğitim ve Araştırma Hastanesi

Pregnancy and childbirth create important physiological changes in the pelvic floor as well as in the whole body. While pregnancy itself can cause pelvic floor disorder, factors such as mode of delivery, baby weight, duration of delivery, patient's age and additional diseases also play an important role in the development of this condition. Pelvic floor diseases affect one third of adult women and reduce their quality of life. In this case report, pregnancy follow-up of a patient with pelvic organ prolapse after pregnancy is described. Case; The patient was 27 years old, had gravida 2 parity 1, had previously given vaginal delivery by mediolateral episiotomy, and applied to her first pregnancy visit when she was 8 weeks pregnant. Since the patient had pelvic organ prolapse (POP) at her first pregnancy visit, she was evaluated as stage 3 according to POP-Q staging. (Picture-1) Combined first trimester screening test was performed on the patient at the 12th gestational week and her cervical length was measured as 37 mm. Combined screening test was 1/6892, and 65-21-32 numbered Arabin Pessary was applied to the patient and vaginal progesterone was started. In the patient, whose routine pregnancy follow-up was continued, globe vesical developed 2 weeks later. The patient was started on gymnastics with a bladder catheter and the pessary was reinserted 1 week later. Cervical length was measured every 2 weeks. The patient was admitted to our clinic at 24 weeks of gestation with a 2 cm gap (Picture-2). The patient was referred to the external center perinatology clinic. Cervical cerclage was not considered for the patient in the perinatology center. The continuation of the pessary application and the continuation of the progesterone treatment were recommended to the patient. 75 grams of OGTT was performed on the patient at 26 weeks of gestation. The patient, who came as fasting 89, 182 at the 1st hour, 150 at the 2nd hour, was diagnosed with gestational diabetes. Sugar monitoring was regulated by diet. The patient was hospitalized at 32 weeks of gestation due to early rupture of membranes. Celestone doses were completed every 12 hours and the patient was delivered vaginally as a 7-8 APGAR 1475 gram male baby. The patient was checked on the postpartum 12th day. (Picture-3) RESULT: Pregnancy and delivery are considered as risk factors for the development of pelvic floor diseases. However, observational studies; are insufficient to draw firm conclusions about the impact of pregnancy and childbirth on the incidence of pelvic floor diseases and whether any changes in obstetric therapy will reduce the risk. However, based on the available evidence, it can be said that vaginal delivery will increase pelvic organ prolapse more than cesarean section.

Keywords: arabian pessary, pelvic organ prolapse, pregnancy, vaginal delivery

picture 1



First Pregnancy Visit

picture 2



24th Week of Pregnancy

picture 3



Postpartum 10th Day

EP-084 [Obstetri Genel]

Lower uterine vertical incision and suturing the fibroid together with incision in the cesarean section of a pregnant woman whose anterior uterine wall is completely covered with fibroids

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INTRODUCTION: In this study, the lower uterine vertical incision and suturing of the incision site with fibroids in the cesarean section of a pregnant patient who had excessive bleeding and whose uterine anterior wall was completely covered with fibroids was evaluated in a case study.

CASE: A 32-year-old, g3 p2, 37-week-old pregnant woman who had undergone 2 previous cesarean sections and whose pregnancy follow-up was not performed came to the clinic with excessive vaginal bleeding. On ultrasonography, uterus was observed as myomatous. Fetal heart rate was observed as positive. Laboratory tests were taken from the patient. 3 erythrocyte suspensions and 3 fresh frozen plasma were requested and the patient was taken to cesarean section urgently. When entered into the abdomen, the uterus was seen as myomatous. Subserous large fibroids of 10 cm, 12 cm, 10 cm and multiple intramural fibroids were observed on the anterior wall. It was observed that these fibroids completely covered the anterior wall of the uterus. Smaller fibroids were seen to cover the fundus. The appropriate incision site to remove the baby could not be found. Thereupon, the bladder was lowered as much as possible and the baby was removed by making a lower uterine vertical incision from the uterus to the bladder. It was observed that myomas were compressing the cavity. Cavity sutures were carefully placed on the bleeding sites. At the same time, the patient's blood level was determined as 5.2 g/dl, myomectomy could not be performed because the necessary blood product for blood replacement could not be prepared yet. Since the upper corner of the incision line is adjacent to the myoma, the upper corner of the corner sutures was tied to the myoma. Bleeding was controlled and since no bleeding was observed, 2 spongostans were placed on the incision line and 1 drain was placed in the abdomen, and the operation was terminated. Subsequently, 3 erythrocyte suspensions and 3 fresh frozen plasma replacements were performed in his bed.

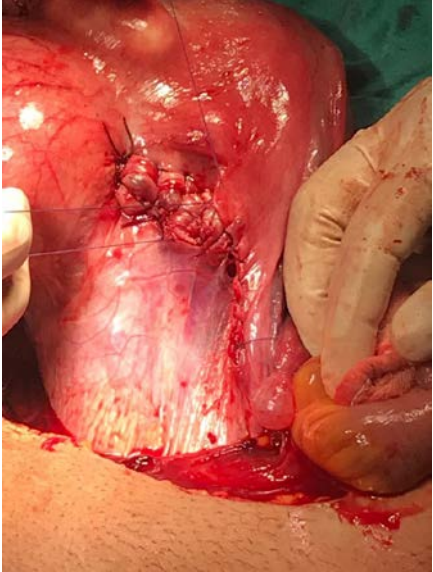
CONCLUSION: In the cesarean section of pregnant women with fibroids in the anterior uterine wall, the incision is usually made by avoiding fibroids. After the birth of the fetus, myoma at or very close to the incision site is enucleated. In some patients, the fetus can be delivered after the fibroids at the incision site are enucleated. In our case, emergency cesarean section was applied to the patient who presented with excessive bleeding and had no pregnancy follow-up. A lower uterine vertical incision was made in the cesarean section of the patient whose anterior uterine wall was covered with fibroids. Enucleation was not performed on the fibroids at the incision site in the patient whose hemoglobin value decreased to 5.2 g/dl after the fetus was removed, since blood preparation could not be performed yet. Since there was a fibroid in the upper corner of the incision line, the incision line was sutured together with the fibroid.

Keywords: cesarean section, fibroid, myoma, incision

Figure 1: Appearance of lower uterine vertical incision after delivery of fetus



Figure 2: Appearance of the incision line after suture



EP-085 [Obstetri Genel]

Investigation of the effect of fetal biometric measurements (BPD, AC) on episiotomy requirement

Ramazan Erda Pay, Ceren Kamacı, İrem Özge Uzunoğlu, Pınar Karaçin, Tuğba Kınay, Yaprak Engin Üstün
University of Health Sciences, Etlik Zübeyde Hanım Training and Research Hospital, Gynecology and Obstetrics Service

OBJECTIVE: Episiotomy, defined as the surgical incision of the vagina and perineum to widen the vaginal opening, was routinely used in the first half of the 20th century. Since 1995, the World Health Organization (WHO) has developed guidelines to limit routine

episiotomy, stating that only fetal distress is recommended as an indication for episiotomy in obstetrics and midwifery guidelines. Instead of the 'routine episiotomy' applied at every birth, the 'restrictive episiotomy' applied when necessary is significantly beneficial for women. Benefits of restrictive episiotomy include less posterior perineal trauma, less suture requirement, and fewer healing complications. There are no valid guidelines for episiotomy performance and the decision of the procedure is based on the clinical judgment of the obstetrician. For this reason, it is very important to determine what the rates of episiotomy are and what the risk factors are related to the clinical use of episiotomy. In previous studies, it was reported that episiotomy was associated with maternal social-demographic characteristics, fetal factors and obstetric factors. In our study, we aimed to examine the effect of Fetal Biometric measurements (BPD, AC) on the necessity of episiotomy.

METHOD: The data of multiparous (parity 1,2,3) pregnant women who applied to Etlik Zübeyde Hanım Training and Research Hospital between December 2021 and April 2022 and had vaginal deliveries were scanned retrospectively. It was not included in the study because of the high rate in primiparous and low rate in grand multipara. 100 pregnant women (Group 1), whose data were fully accessible and who did not undergo episiotomy, were grouped as 52 pregnant women who underwent episiotomy (Group 2). Demographic data (Gravida, Parity, BMI, Age, Smoking, Comorbidity) and clinical data (fetal biometric measurements, delivery room entry data, birth and postpartum period data, newborn data) were recorded by scanning patient files and hospital information system. The data were analyzed by descriptive statistical methods. Correlation between fetal biometric measurements and episiotomy requirement was examined and ROC analysis was performed by determining cut-off values.

RESULTS: In our Tertiary Center, 1021 vaginal deliveries occurred between December 2021 and April 2022, of which 811 were multiparous. There was a significant difference between the groups in terms of gravida and parity from demographic data. (Table 1) As clinical data, a significant difference was observed between the groups in fetal biometry AC (Abdominal circumference) and newborn weight from delivery room admission, intrapartum, postpartum follow-up and newborn data. (Table 2) There was no significant difference between the groups in other data and BPD (Biparietal Diameter). A positive correlation was observed between AC and Newborn Weight and the application of episiotomy. ($p=0.02$, $p=0.01$) AC measurement was 57% Sensitivity 69% Specificity 335.5 mm cut-off value was found when episiotomy was required. In the measurement of Newborn Weight when episiotomy was required, 63% Sensitivity 60% Specificity 3205 gr cut-off value was found. (Table 3) (Figure 1,2)

CONCLUSION: As the rate of cesarean section increases, the frequency of episiotomy is also increasing due to interventional approaches rather than following the labor as a physiological process. We recommend performing episiotomy when necessary in order to support the normal delivery of the newborn. Considering that newborn weight and AC (Abdominal circumference) measurement may cause many obstetric complications, including shoulder dystocia, we think that AC and Estimated Fetal Weight (EFW) measurements should be done carefully and are effective in the decision of episiotomy.

Keywords: Vaginal deliveries, Episiotomy, AC (Abdominal circumference), BPD (Biparietal Diameter)

Table 1. Demographic data of pregnant women included in the study

	Not episiotomy (n = 100) (%65,8)	with episiotomy (n = 52) (%34,2)	P
Age (years) (mean, std dv)	27,02 ± 4,807	26,31 ± 5,607	0,41*
Gravida (mean, std dv)	3,04 ± 828	2,71 ± 997	0,03*
Parity (mean, std dv)	1,91 ± 753	1,56 ± 725	0,006*
BMI (kg/m2) (mean, std dv)	28,11 ± 4,325	28,46 ± 3,852	0,09*
Smoking (%)			
Yes	17 (%17)	8 (%15,4)	0,79**
No	83 (%83)	44 (%84,6)	

*Student-T test **Ki-Kare Test(x2)

Table 2. Clinical data of pregnant women included in the study

	Not episiotomy (n = 100) (%65,8)	with episiotomy (n = 52) (%34,2)	P
Gestational week (mean, std dv)	38,68 ± 1,26	38,50 ± 1,32	0,41*
Delivery Room Reason (%)			
Contraction	89 (%89)	45 (%86,5)	0,48**
Membran Rupture	5 (%5)	5 (%9,7)	
Surmatuity	6 (%6)	2 (%3,8)	
BPD (mean, std dv)	92,49 ± 2,33	93,04 ± 2,40	0,17*
AC (mean, std dv)	331,08 ± 11,29	337,62 ± 13,99	0,002*
Prepartum hb (g/dl) (mean, std dv)	12,0660 ± 1,32094	11,7750 1,53494	0,22*
Postpartum hb (g/dl) (mean, std dv)	11,1420 ± 1,27423	10,7346 ± 1,58855	0,08*
Delta hb (g/dl) (mean, std dv)	9240 ± 58190	1,0404 ± 55599	0,14*
Newborn Weight (g) (mean, std dv)	3170,10 ± 350,00	3335,48 ± 394,37	0,009*
Newborn Gender (%)			
Female	60 (%60)	29 (%55,8)	0,61**
Male	40 (%40)	23 (%44,2)	

*Student-T test **Ki-Kare Test(x2)

Table 3. The relationship between AC, Newborn Weight values of pregnant women included in the study and episiotomy

	AUC	Sensitivite	Spesifite	p	Cut off
AC (mm)	0,64	%57	%69	0,003	335,5
Newborn Weight (g)	0,62	%63	%60	0,012	3205

EP-086 [Obstetri Genel]

The course and management of pregnancy after heart surgery with Tetralogy of Fallot (Case Report)

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Scientific Research Institute of Obstetrics and Gynecology, Baku,
Azerbaijan

Cardiovascular disease is one of the most common non-obstetric causes of maternal death. Management of these situations can be difficult for the entire mother and fetus care team. Advances in cardiac surgery has improved quality of life and cardiovascular function in patients with congenital or acquired heart defects. These diseases complicate 0.1-4% of pregnancies. Complications in the mother can occur in the form of thromboembolic events, hemorrhagic events, and heart failure. When exposed to anticoagulant therapy and other drugs prescribed to the patient

to support the cardiovascular system, the fetus is at risk, conditions such as intrauterine growth retardation and hypoxia may occur. At the age of 25, patient N applied to the Outpatient Diagnostic Department of the Scientific-Research Institute of Obstetrics and Gynecology with a complaint of infertility for 3 years. Clinical-laboratory and instrumental (ultrasound, hysterosalpingography, etc.) examinations and appropriate treatment (induction of ovulation) pregnancy has happened. With the first pregnancy on 11.01.21 female (G1P0) applied for registration has done. Date of last menstruation 16.10.2020. According to the anamnestic data of a pregnant woman at the age of 10 underwent surgery for the Heart defect in Moscow. According to a postoperative report, in 2005 in Russia The patient was diagnosed with Fallo tetrad, combined stenosis of the pulmonary artery, hypoplasia of the left pulmonary artery. Against the background of open heart surgery was performed, the defect radical correction was made. The pregnant woman was examined according to the clinical protocol for antenatal care. In the woman an iron supplement was prescribed for mild iron deficiency anemia. In addition, for heart function control at every visit to assess the condition cardiologist consultation, ECG (electrocardiography) and ECHO (echocardiography) examination were performed. Pregnancy antiplatelet (low dose aspirin - 100 mg daily) and anticoagulant (low molecular weight heparin - sodium) for thromboprophylaxis enoxiparin 40mg daily) followed by treatment was made. Antiplatelet therapy due to the risk of early obliteration in fetal botal discharge suspended for a 32 weeks of pregnancy. Anticoagulant therapy continued until 24 hours before birth. Pregnancy passed physiologically, obstetric pathology and decompensation of the cardiovascular system not founded. Pregnancy on 09.07.21 at 38-39 weeks of gestation completed with C-section birth by spinal anesthesia. Sex male, weight 3700g, height 54cm live, healthy baby was born, on the Apgar scale rated 7/8. Female surgery time was hemodynamically stable, A / t-100/60 mm.c.st, Ps-84 bits / min, SpO2-98%. Operation and the postoperative period passed without complications. At postpartum period anticoagulant therapy in the first 7 days of the cycle (sodium enoxiparin 40mg subcutaneously daily) continued. On the 5th day full woman written home with the child in good condition.

Keywords: pregnancy, heart disease surgery, anticoagulants

Poster presentation of abstract

The course and management of pregnancy after heart surgery with Tetralogy of Fallot (Case Report)

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Tetralogy of Fallot

1. Aortic stenosis
2. Mitral regurgitation
3. Pulmonary stenosis
4. Ventricular septal defect

* Tetralogy of cardiac defects

EP-087 [Obstetri Genel]

Postpartum septic shock due to spontaneous splenic rupture after cesarean section: a rare case report with maternal survival

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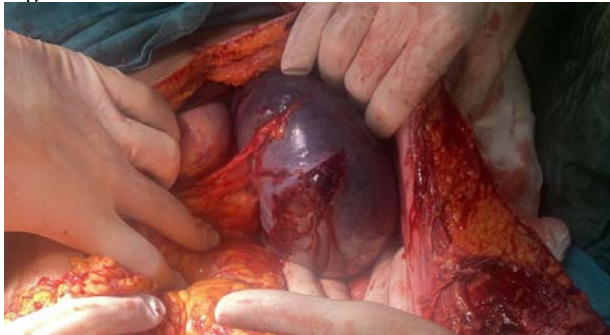
BACKGROUND: Postpartum septic shock and splenic rupture is a rare clinic entity that carries high risk of mortality. Only few cases of splenic rupture have been described in third trimester or puerperium. Massive splenomegaly is one of the causes of splenic rupture during the pregnancy or puerperium.

CASE: We present the case aged 21 years who came with high fever, tachycardia and hypotension, 5 days after giving birth by primary cesarean section in another hospital. An emergency operation was determined with a diagnosis of septic shock and acute abdomen. A diagnostic laparotomy revealed massive splenomegaly and an approximately 3-4 cm defect was detected in splenic capsule at the lower pole of the spleen. Splenectomy was performed. Uterine atony was occurred during operation and two parallel vertical compression sutures (Hayman stitch) placed to control uterine bleeding. Massive transfusion was performed during operation and the patient was transferred to intensive care unit. Intravenous antibiotics were given to cope with sepsis (procalcitonin level higher than 100 ng/mL) and after 10 days she was extubated. Secondary sutures were needed to close surgical incision again. She was discharged on day 20 after admission.

CONCLUSION: This case indicates that in case of septic shock and acute abdomen, with the development of uterine atony were managed successfully with a multidisciplinary approach involving obstetrician, gastroenterologist, and intensivist. Spontaneous splenic rupture is a rare event and the rupture should be suspected in woman with unexplained abdominal pain or with clear signs of haemorrhage.

Keywords: splenic rupture, postpartum shock, postpartum bleeding

Figure 1



Area of the splenic rupture

Figure 2



Compression sutures

EP-088 [Obstetri Genel]

Role of ECMO in pregnant women with severe covid

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Covid19 infection was first isolated in China, causing a pandemic. Thus, ECMO treatment and its results have received great attention, which play an important role in the survival of patients who has serious infection in the ICU. 4-6% of patients in the ICU are pregnant. Therefore, ECMO treatment indication can be applied in those who has severe covid. There are very few studies on this in pregnancy.

CASE: Here we present the ECMO treatment used in the treatment of a patient with severe Covid 19 infection. She has not responded to non invasive and invasive ventilation treatment.

CONCLUSION: ECMO treatment can be applied when non invasive and invasive treatment doesn't respond to developed ARDS in a pregnant woman with severe Covid infection. Informing the patients about vaccination in every trimester of pregnancy is vital. The patients with serious infection should be referred to the centers where necessary treatment can be done.

Keywords: ARDS, ECMO, PREGNANCY, COVID19

ECMO



Role of ECMO in pregnant women with severe COVID

EP-089 [Obstetri Genel]

Acrania With Multiple Anomalies

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Denizli, Turkey

Acrania is a rare developmental anomaly characterized by the lack of development of part or all of the cranium despite nearly complete development of the brain tissue. It is distinguished from anencephaly sonographically by the presence of brain tissue. Anomaly incompatible with postnatal life should be detected as early as possible in order to terminate the pregnancy. Today, it can be diagnosed at 10-14. weeks of gestation.

CASE: A 30-year-old patient gave birth at 31 weeks of gestation with a diagnosis of acrani. The patient was diagnosed with acrania at 13 weeks in our clinic. The patient and her husband were informed in detail. Termination of pregnancy was recommended but they did not accept the termination of pregnancy due to their religious beliefs. The patient was then referred to our perinatology clinic. Ultrasonographic examinations revealed acrania, neural tube defect, intestinal structures protruding from this defect, and an extra extremity compatible with the limb in the dorsal region. The patient, who presented to the emergency department with pain, vaginal bleeding, and discharge of water at the 31st week, was born on the same day. The fetus died in the postpartum period. In the postnatal examination of the fetus, acrania, cleft palate, cleft lip, neural tube defect starting from the cervical region and extending to the sacral region, intestinal loops protruding through this defect, and the third upper extremity in the left lateral dorsal region were detected. It was determined that the formation of anogenital structures was not completed and they were defective.

Discussion: Acrania is a rare congenital anomaly in which the cranial bone tissues and cerebral hemispheres are underdeveloped or disorganized. It is known that it develops as a result of insufficient migration of mesenchymal cells that make up the calvarial bones and brain tissue under the ectoderm layer in the 4th week of embryonic development. Most of the sonographically detectable cases were reported at the earliest 10-14th weeks. Cranial ossification is completed in the 13th week, so it isn't recommended diagnosis before the 11-12st week. Diagnosis of acrani is small head relative to trunk; It is placed when the cortical brain tissue and facial bones can be observed, but the calvarium bones cannot be observed. Monitoring of cerebral hemispheres in acrani helps to distinguish sonographically from anencephaly. Defective development of mesodermal and ectodermal tissue is considered as the etiological cause in acrani. In the literature, it has been reported in some publications that acrani is related to anterior closure defect and leads to anencephaly. It has been suggested that the brain tissue under the influence of amniotic fluid partially atrophies over time in cases diagnosed in the late period, and therefore acrania may lead to anencephaly.

Conclusion: Acrania is a central nervous system anomaly whose etiology has not yet been clearly defined and cannot be based on genetic basis. It should not be forgotten that other congenital anomalies may also be present. Early diagnosis can always be made by careful ultrasonographic examination by an experienced physician.

Keywords: Acrania, Exencephaly, Anencephaly, Ultrasonography**Picture 1: Neural Tube Defect Starting from The Cervical Region and Extending to The Sacral Region****Picture 2: The Third Upper Extremity in The Left Lateral Dorsal Region****Picture 3: Incomplete Anogenital Structures**

EP-090 [Obstetri Genel]

Adult-Onset Still's Disease in PregnancyYasemin Doğan, Aylin KurtaliDepartment of Gynecology and Obstetrics, Kocaeli University,
Kocaeli, Turkey

Introduction: Adult-onset Still's disease (AOSD) is an inflammatory disorder characterized by the classical triad of daily spiking fever, arthritis, and typical salmon-colored rash. However, it can affect many organs and systems. It usually occurs at reproductive ages, so, new onset AOSD might be seen during gestation or a patient with previous diagnosis may become pregnant. Due to its rarity, the influence of the disease on pregnancy has been addressed in a few studies. Case series found increased rate of obstetric complications including, spontaneous abortion, prematurity and intrauterine growth retardation in AOSD patients. Our aim is to highlight the complications associated with AOSD flare in a pregnant patient who had been previously diagnosed with Still's disease.

Case Presentation: A 28-year-old G2P1 woman with a diagnosis of AOSD was admitted to the emergency department at 33rd gestational week with flu-like symptoms and rash on the legs. The patient was diagnosed with AOSD six years ago and received methotrexate, tocilizumab and methylprednisolone treatment before pregnancy. She was in complete clinical remission without medication until her symptoms began ten days before admission. Erythematous maculopapular rash that coalesced to form large plaques on her abdomen, thighs and arms was detected during inspection (Figure 1). Her temperature was 36.7°. Laboratory investigations revealed anemia (hemoglobin 9.7 g/dl), neutrophilic leukocytosis (WBC 18,900/mm³ of which 14,050 neutrophils), elevated C-reactive protein level (CRP 98 mg/L), and increased ferritin level (762 mg/dl). Antinuclear antibody (ANA), Antineutrophilic cytoplasmic antibody (ANCA), Anticardiolipin IgM -IgG were negative. She was hospitalized and fetal well being was evaluated daily, 40 mg/day methylprednisolone was initiated. Unfortunately, her skin lesions were worsened. Three days after hospitalization, nonstress test showed acute fetal distress signs. A 2030 gr baby girl with an Apgar score of 3/7 was delivered by cesarean section. Steroid treatment was increased gradually and she was transferred to the rheumatology service on the third postoperative day. After development of new rashes on the anterior aspect of her legs, a preliminary diagnosis of vasculitic attack was considered. Biopsy of the rash revealed leukocytoclastic vasculitis. Pulse methylprednisolone (500 mg) for 3 days was planned for the patient. Consequently, steroid therapy was tapered beginning with 60 mg/day.

Conclusion: AOSD is not an unharmed disease during gestation. Multidisciplinary management by obstetrician, maternal fetal medicine specialist and rheumatologist is important before, during and after pregnancy. Moreover, an extensive counseling about the increased risk for obstetric complications is essential in all pregnant patients with AOSD.

Keywords: Adult-Onset Still's Disease, Pregnancy, Salmon-colored Rash

Figure 1



Erythematous maculopapular rash that coalesced to form large plaques on her abdomen, thighs and arms was detected during inspection

EP-091 [Obstetri Genel]

Spontaneous Uterine Rupture With An Unscarred Uterus Region In IVF PregnancyÖmer Ünal, Berivan GüzelbağSağlık Bilimleri University Faculty of Medicine, Kanuni Sultan
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Rupture of pregnant uterus is an uncommon but severe obstetrical event. It occurs mostly secondary to a previous cesarean section with an incidence of around 1%. The estimated incidence of a rupture of unscarred uterus region is 1/8000-15000 deliveries. Rupture in an unscarred uterus region is extremely rare and in most cases unexpected. We report a case of a spontaneous rupture of an unscarred uterus region in an IVF pregnancy, 35 + 3 weeks of gestation. A 34-year-old gravida 2, para 1 woman who had previous cesarean delivery was being followed in a perinatology clinic with mild pre-eclampsia, IUGR, IVF pregnancy. She had no significant past medical history. Pre-eclampsia was treated with magnesium sulfate and methylprednisolone. She received corticosteroids for accelerating fetal lung maturation. Ultrasound showed intrauterine growth-restricted child in transverse position with an estimated fetal weight of 1900 grams and normal umbilical artery doppler screening. Three days after admission (35 + 3 weeks) our patient complained about a decrease in baby movements. Cardiotocogram didn't show reassuring fetal heart rate pattern and fetal biophysical profile score six. Our patient did not have abdominal pain. On clinical examination, she looked anxious with a blood pressure of 135/75 mmHg, a pulse of 88 beats per minute, a temperature of 36.9 °C, and normal respiratory rate. We decided to deliver patient by cesarean section urgently due to fetal distress. In emergency laparotomy, we saw vascular increase in uterine anterior wall and myoma of about 3 cm. An 1850 grams female baby was delivered alive, Apgar 7/9, foot presentation, by uterus lower segment incision. After spontaneous separation of placenta, uterus was taken out. We saw uterus was torsioned approximately 90 degrees to right before cesarean, uterus returned to normal plane with removal of uterus. We realized that incision is mandatory vertical incision. We saw uterus was ruptured 5 cm from left fundal region and was closed only by amniotic membranes and right ligamentum rotundum was close to uterus anterior and right midline; left ligamentum rotundum was close

to uterus posterior and left midline and left tuba infundibulum region adhered to posterior wall of uterus and right tuba adhered to right side of posterior wall of uterus, douglas was highly adherent, ovaries could not be seen clearly due to adhesions, 2 cm of myoma and 2 cm of intestinal loop adhered on posterior wall of uterus. Vertical incision was closed with separated sutures and rupture area was closed with a continued lock. Patient was discharged with full recovery 2 days after surgery. The most common rupture sites were cornual area and uterine fundus. In our case, uterine rupture was not due to previous cesarean scar. There was no (painful) asymmetrical enlargement of her uterus or abdomen with physical examination. We should suspect uterine anomalies in secondary infertile, IUGR, SGA patients. First cesarean of patient was in our hospital, we know there were no uterine anomalies in records of previous cesarean. A rupture of pregnant uterus should always be considered in a pregnant woman.

Keywords: pregnant, rupture, spontaneous, uterus

Figure-1



Mandatory vertical incision

Figure-2



Mandatory vertical incision

Figure-3



Rupture of uterus region

Figure-4



Rupture of left fundal region was closed by amniotic membranes

Figure-5



Rupture of left fundal region was closed by amniotic membranes

Figure-6



Rupture of uterus region

Figure-7



Rupture of uterus region

Figure-8



Left ligamentum rotundum

Figure-9



Posterior wall of uterus

EP-092 [Obstetri Genel]

A case of PRES syndrome followed in the postpartum period

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Introduction: Posterior reversible encephalopathy syndrome (PRES) headache, mental status changes and an epileptic seizure is characterized by visual disturbances and is typically seen on imaging of the brain. There are transient changes in the posterior circulation area. of this syndrome neuroimaging in the occipital and parietal lobes, typically in the subcortical white matter, sometimes symmetrically located edema is observed in the cortex. In cases of severe preeclampsia It should be considered especially after an eclampsia episode. In our case, severe preeclampsia We aimed to describe our patient who was diagnosed with PRES syndrome after postpartum

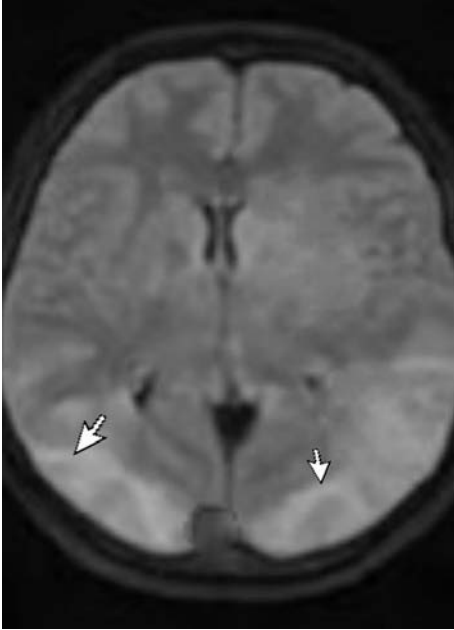
CASE: A 29-year-old and 39-week-old pregnant patient was admitted to the emergency room with complaints of headache and blurred vision. applied. It was the first pregnancy of the patient and there was no problem in the follow-up. The patient's TIT: +++ protein was detected in the examinations performed in the emergency department. Measured blood pressure value 170/105 mm/Hg. With the diagnosis of severe preeclampsia, the patient was hospitalized with a planned delivery. to the patient MgSO₄ treatment was started due to eclampsia prophylaxis and it was evaluated for high blood pressure. Nifedipine was given. The patient was taken to cesarean section under emergency conditions. Single live baby weighing 3300 gram was born. Generalized tonic-clonic disease characterized by loss of consciousness at the 2nd post-operative hour. He started having seizures. In the postictal period, the patient was followed up in the ward and a brain MRI was requested. Diffusion limitations, especially in the occipital region, on diffusion MRI seen. In these defined regions, MRI is hypointense on T1-weighted images and hypointense on T2 sequences. Presence of hyperintense lesions was found to be compatible with PRES. Neurological follow-up It was observed that the seizures did not recur in the patient whose physical examination returned to normal limits. Therefore, antiepileptic

treatment was not started in the patient. In the follow-up, the patient recovered completely. Antihypertensive treatment was arranged and she was discharged on the 4th post-operative day with full recovery.

CONCLUSION: Although the clinical features of posterior reversible encephalopathy syndrome are variable, mainly headache, nausea, mental status changes such as confusion, convulsion. It presents with visual impairment and focal neurological findings. severe preeclampsia. Although MgSO₄ was started in cases of eclampsia in the postpartum period, It should not be forgotten that it can pass. These patients should be followed multidisciplinary and Neurological examination, MRI, EEG examinations are also included in order to rule out other possible causes. A comprehensive examination should be carried out.

Keywords: eclampsia, pregnancy, seizure, preeclampsia, PRES

MR Image of the patient



FLAIR sequence in axial section in bilateral occipital cortex and subcortical areas partially in deep white matter hyperintense signal change

EP-093 [Onkoloji]

Retroperitoneal ganglioneuroma incidentally found in a patient presenting with renal colic

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Ganglioneuroma (GN) are rare benign tumors that arise from the neural crest cells. In most cases, GN is found in the mediastinum or retroperitoneum incidentally. Patients of all ages are affected, but it is classically seen in adolescents and young adults. Patients are usually asymptomatic but can present with unspecific symptoms caused by space-occupying effects.

We present a case of a 21 - year-old woman with no significant past medical history presented to the emergency department with sudden-

onset left upper and lower quadrant pain. Examination revealed left lower quadrant on palpation. There were no palpable masses. Urinalysis revealed 3+ blood. Computed tomography (CT) of the abdomen, the retroperitoneal mass was observed as a 13x7 cm dumbbell-shaped, homogeneous, and hypodense neoplasm (CT value, 28HU) with a well-defined margin, and was compressing left common iliac vein and artery with an incomplete encasing of the abdominal aorta. (figure 1). An exploratory laparotomy was performed, and the mass was removed (Figure 2,3). Immunohistopathological examinations confirmed a benign ganglioneuroma. The patient recovered well after the procedure and was discharged on the fourth postoperative day. Her symptoms were completely relieved. She remained asymptomatic at her 3-month follow-up, and an ultrasound of the abdomen was normal.

GN is a benign tumor and generally asymptomatic, but occasionally can produce hormones and manifest with symptoms. Although the imaging studies, including CT, are available to detect these tumors, the definitive diagnosis can only be made by histological examination. Overall, the prognosis is good following the surgical removal of the tumor. GNs should be considered in the differential diagnosis of any circumscribed retroperitoneal mass.

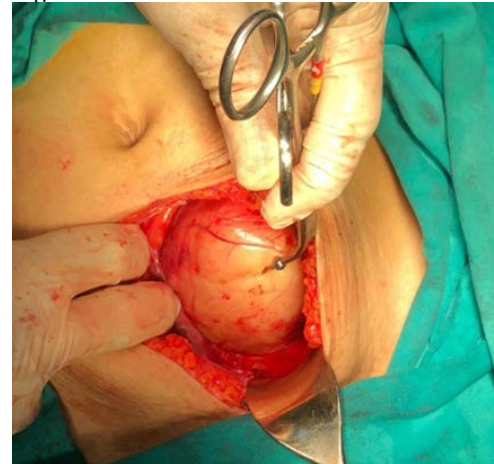
Keywords: Incidentally, Ganglioneuroma, Retroperitoneal mass

Figure 1



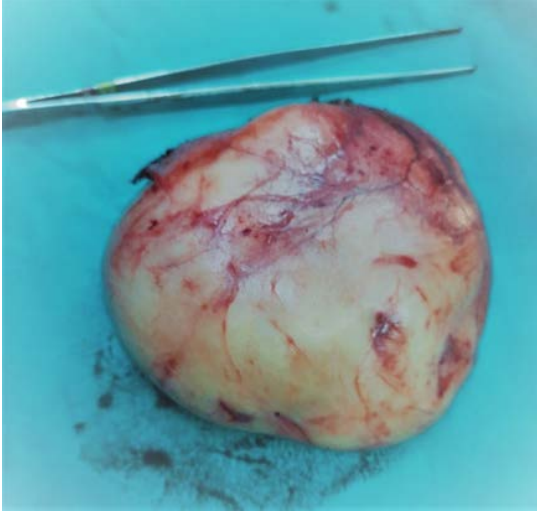
Abdominal computed tomography (CT) findings.

Figure 2



Intraoperative findings.

Figure 3



The resected specimen

EP-094 [Onkoloji]

The Relationship Between Pre-Treatment Prognostic Nutritional Index Value and Chemotherapy Toxicity in Epithelial Ovarian Cancer Patients Receiving Paclitaxel-Carboplatin Treatment

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OBJECTIVE: One of the most challenging problems in the process of platinum- based chemotherapy after primary cytoreductive surgery, which is conventionally applied in the treatment of epithelial ovarian cancer, is drug-related toxicities. Aim of this study is to investigate the relationship between PNI (Prognostic Nutritional Index) value checked before chemotherapy and toxicities occurring during chemotherapy.

MATERIAL-METHOD: This study was conducted by screening patients who received 6 cycles of carboplatin / paclitaxel treatment after primary surgery for epithelial ovarian cancer between December 2010 and December 2020 at the University of Health Sciences Etlik Zubeyde Hanım Obstetrics and Gynecology Training and Research Hospital; 158 patients were included and their medical records and chemotherapy follow-up forms were scanned. We arranged the chemotherapy toxicity follow-up forms according to the 'common terminology criteria for adverse events, version 4.0'. PNI cut-off value was calculated as 34.1 to determine toxicity in patients and the patients were evaluated by dividing them into two groups. Of these patients, 43 were included in the low PNI group and 115 were included in the high PNI group.

RESULTS: Age, BMI (body mass index) and additional medical status of the two groups were similar according to the cut-off value. In the group with low PNI (≤ 34.1), the hematological toxicity rate was increased in the whole group between grade 1 to 4 ($p < 0.05$). There was no significant difference between these two groups in evaluations of gastrointestinal system, neurotoxicity, alopecia and pain. In addition,

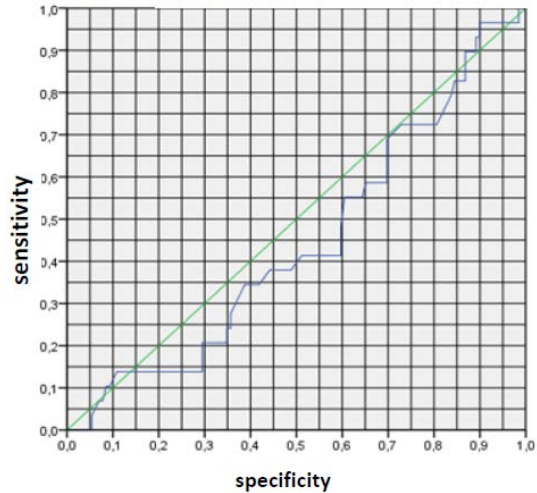
in the low PNI group; a significant correlation was found in terms of increased recurrence rate, greater weight loss, more ES (erythrocyte suspension) transfusion need and dose reduction ($p < 0.05$).

CONCLUSION: Although various scoring systems used to predict toxicity, which is one of the most important rate-limiting steps in the chemotherapy process, have been proposed, they have mostly been limited to predicting advanced-stage toxicities in the geriatric population. Although the PNI value has been used to predict prognosis in many malignancies, studies in the field of toxicity are still very new. The significant relationship between pre-treatment PNI value and hematological toxicity rates in this study is a promising result in terms of identifying risky groups before chemotherapy. Besides; other parameters such as weight loss, ESP transfusion, dose reduction suggest that it may be a useful parameter to predict complications that may occur during the treatment process. Since PNI value has not been evaluated in terms of toxicity in gynecological cancers before in the literature, we think that the results of this study will contribute to this area. We think that a parameter can be developed that can be put into routine practice in the future.

Keywords: Epithelial ovarian cancer, Prognostic nutritional index, toxicity

figure 1

Figure 1. ROC CURVE



ROC Curve

table 1

Distribution of Hematology Toxicity in All Grades						
		None	Grade 1	Grade 2	Grade 3	Grade 4
Low PNI Group (≤ 34.1) (n=43)	Patients	4	8	5	10	16
	Toxicity percentage	%9,3	%18,6	%11,6	%23,3	%37,2
High PNI Group (> 34.1) (n=115)	Patients	6	21	34	36	18
	Toxicity percentage	%5,2	%18,3	%29,6	%31,3	%15,7
Difference between both groups (p value)		0,015*	0,015*	0,015*	0,015*	0,015*

*p<0.05 indicates statistical significance.

Distribution of hematological toxicities at all grades according to the PNI

Low and high grade grouped distribution of hematological toxicities according to the PNI

		Hematology Toxicity		
		Low grade toxicities	High grade toxicities	Total
Low PNI Group (≤34.1)(n=43)	Patients	17	26	43
	Toxicity percentage	%39,5	%60,5	%100
High PNI Group (>34.1) (n=115)	Patients	61	54	115
	Toxicity percentage	%53,0%	%47,0	%100
Difference between both groups (p value)		0,091	0,091	

*p<0.05 indicates statistical significance.

EP-095 [Onkoloji]**Angiomyxoma of the vagina: a case report**

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INTRODUCTION: Angiomyxoma is a rare soft tissue tumor. It was first described by Steeper and Rosai in 1983. This tumor was reported in around 150 cases in literature since then. Patients usually apply to the hospital with a palpable mass in the vulva and/or incidental imaging results. In our case, a 67-year-old patient who was confused with uterine cuff prolapse is presented.

CASE: A 67-year-old woman was applying to the hospital with a mass growth in the vagina. A female patient has a complaint of a palpable mass in the vagina that started 2 years ago and has growing more rapidly in the last three months. There was no history of trauma, any associated itching, and urinary symptoms. The patient has three normal vaginal deliveries. He has had HT for fifteen years. The patient had total abdominal hysterectomy +bilateral oophorectomy due to abnormal uterine bleeding in 2014. Pathology result was evaluated as myoma uteri. The patient's palpable mass in the vagina was evaluated with the first diagnosis of cuff prolapse. Gynecologic examination, a 2cm base and 3cm long, 5cm diameter polypoid lesion was observed on the anterior wall of the vagina, approximately 4cm from the urethra (Figure 1). The patient's lesion was completely excised surgically. The patient was diagnosed with superficial angiomyxoma with positive estrogen and progesterone receptors.

DISCUSSION: Angiomyxoma is a rare mesenchymal tumor that usually affects women in the 30s and 40s. Preoperative diagnosis is difficult given its rarity and absence of diagnostic features, but should be considered in every woman presenting with a pelvic or perineal mass at a reproductive age.

Keywords: Angiomyxoma, Rare tumour, Vaginal neoplasm.

Figure 1*Tumor on gross examination***EP-096 [Onkoloji]****The effect of intraoperative frozen section on survival in endometrioid type endometrial cancer**

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PURPOSE: The goal of this study was to see how an intraoperative frozen section (IFS) affected the survival rate of women with endometrioid type endometrial cancer.

METHODS: Between January 2011 and December 2021, the records of 393 patients who had total hysterectomy, bilateral salpingo-oophorectomy, pelvic and/or paraaortic lymphadenectomy for endometrioid type endometrial cancer in a tertiary center were reviewed retrospectively. The study comprised 362 cases that were found to be low risk (grade 1 or 2 histology, less than 50% myometrial invasion) by preoperative histological examination and imaging studies. The cases were separated into two groups: those with IFS and those without, and their survival rates were compared.

RESULTS: 43 (11.9%) of the 362 cases had no postoperative oncological follow-up records. IFS was not used in 121 (37.9%) of the 319 cases that had postoperative oncological follow-up, although it was used in the remaining 198 cases (62.1%). A statistically significant difference in survival was observed between the group that did not undergo the frozen section and the group that was applied [respectively: 109.3 ± 4.8 (100.0-118.7); 107.3 ± 2.4 (102.5-112.0); p = 0.029]. This significant difference was not observed in the survival rates recalculated by applying correction according to the disease stages determined by the final pathology results (p = 0.155).

CONCLUSION: The survival rate in endometrioid type endometrial

cancer is affected by the disease stage in the final pathology rather than the IFS application.

Keywords: endometrial cancer, frozen section, survival

Table 1: Demographic and clinical characteristics of the cases

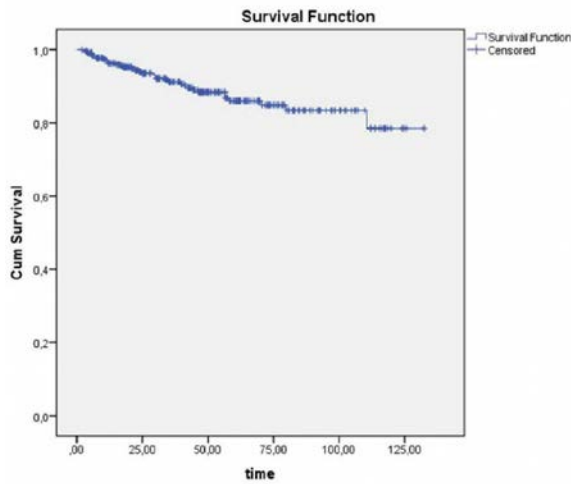
Veri	IFS uygulanmamış	IFS uygulanmış	P değeri
Yaş (yıl)	60,0±10,1	59,9±9,6	0,947
Diabet yok (n; %)	58; 41,1	83; 58,9	0,132
Diabet var (n; %)	77; 35,8	134; 64,2	
Myometriyal invazyon < %50 (n; %)*	76; 33,5	151; 66,5	
Myometriyal invazyon ≥ %50 (n; %)*	59; 45,4	71; 54,6	0,026
Ca-125 IU/ml	45,6±12,2	22,1±3,1	0,215

* Based on final pathology data.

Table 2: Distribution of the cases according to the final pathology results

Veri	IFS uygulanmamış	IFS uygulanmış	P değeri
Myometriyal invazyon < %50 (n; %)	76; 33,5	151; 66,5	0,026
Myometriyal invazyon ≥ %50 (n; %)	59; 45,4	71; 54,6	
Final Histoloji (n; %)	Grade 1	83; 61,5	0,574
	Grade 2	41; 30,4	
	Grade 3	11; 8,1	

Figure 1: Cumulative survival curve of cases



* Based on final pathology data

Figure 2: Comparative survival curves of the cases according to frozen application conditions

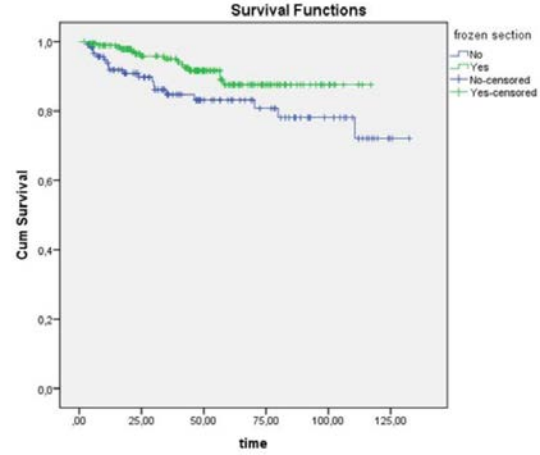


Figure 3: Effect of early and advanced disease stage detected by final pathology on survival curves

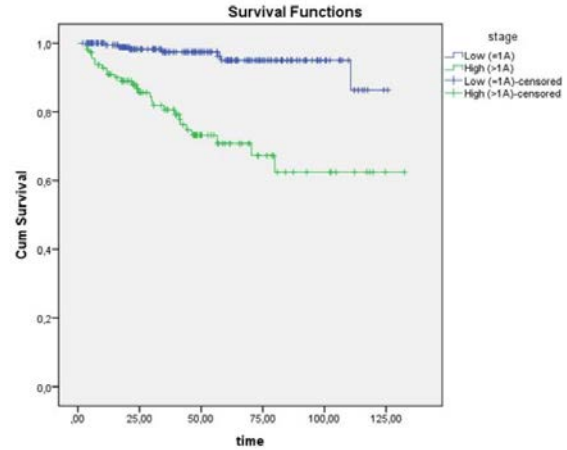
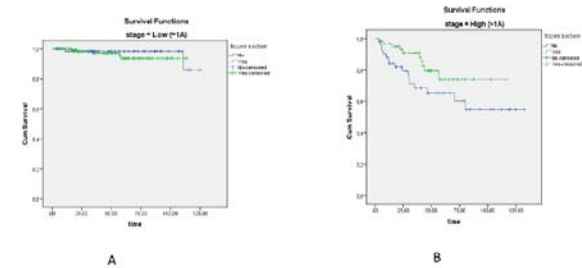


Figure 4: Effect of intraoperative frozen section application on survival curves



A: In early stage cases B: In advanced stage cases

EP-097 [Onkoloji]

Femoral artery rupture due to tumor invasion of the femoral artery in a patient with recurrent vulvar cancer: A Case Report

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Vulvar cancer is the 4th most common gynecological malignancy. Most recurrences of vulvar cancer occur in the first year after definitive treatment. Femoral artery rupture due to tumor invasion of the femoral artery is rare complication in recurrent vulvar cancer. We present a case of spontaneous bleeding due to femoral artery rupture of the femoral artery invasion in which the patient died despite urgent surgical intervention.

INTRODUCTION: Vulvar cancer is the 4th most common gynecological malignancy¹. The mean age at diagnosis is 68 years. Most patients can be diagnosed at an early stage. Squamous cell carcinoma (SCC) is the most common histologic type, accounting for at least 75 percent of cases.. Bleeding from the femoral artery is rare in recurrent vulvar cancers and a life-threatening complication in patients with tumor necrosis after radiotherapy (RT), despite clinical management and surgery.

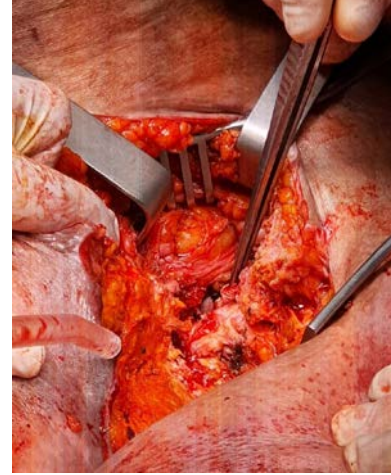
METHOD: case report

FINDINGS: A 70-year-old patient with the diagnosis of vulva cancer applied to the emergency department of our hospital with the complaint of a tumor of approximately 3 cm in width, consistent with recurrence, and bleeding in the left inguinal region. After right vulvectomy and right inguinal lymphadenectomy in July 2011, the pathology result of the patient was found to be grade 2 squamous cell carcinoma and negative surgical margin. In April 2012, left labium majus wide excision was performed and the surgical margin was found to be negative. Local radical vulvectomy and left inguinal lymphadenectomy was performed in February 2021, upon detection of recurrence in the patient. However, in the follow-up of the patient, a 1 cm mass lesion invading the femoral artery in the left inguinal area was evaluated as a residual; The patient received a total of 37 sessions of RT. Antibiotherapy was started due to wound infection. Plastic surgery consultation was performed for secondary suturation. However, it was stated that this area was not suitable for suturing. Medical oncology recommended systemic chemotherapy, but the patient and his relatives did not accept the treatment. During hospitalization, the patient had a sudden onset of pulsatile bleeding from the invading area with tumor tissues in the left inguinal region, and the patient lost consciousness; The patient taken to an emergency operation with Cardiovascular Surgery. surgeons decided that the tumor-invaded area was not suitable for iliopopliteal bypass. External iliac artery and superficial femoral artery were ligated. The patient, who was taken to the postoperative intensive care unit and continued to be intubated by orthopedics and cardiovascular surgery in terms of amputation, cardiac arrest occurred and she died despite all the interventions.

CONCLUSION: Femoral artery rupture due to tumoral invasion of the femoral artery is a rare complication and causes life-threatening bleeding. It was thought that the graft was not suitable for bypass because the tissues due to radiotherapy were hard and edematous, and

the necrotic tissue and defect were large. Therefore, external iliac artery and femoral artery ligation were performed to stop the urgent bleeding.

Keywords: Femoral artery, Squamous cell carcinoma, Vulva Cancer

Carcinoma invading the femoral artery

perioperativ view

External iliac artery and Femoral artery**Lesion in the left inguinal area**

EP-098 [Onkoloji]

Familial Swyer Syndrome; complete pure gonadal dysgenesis in two sisters, manifested as two different clinics and associated with 46 XY-karyotype

Ozan Karadeniz¹, Engin Celik¹, Gizem Nur Koyan Karadeniz²

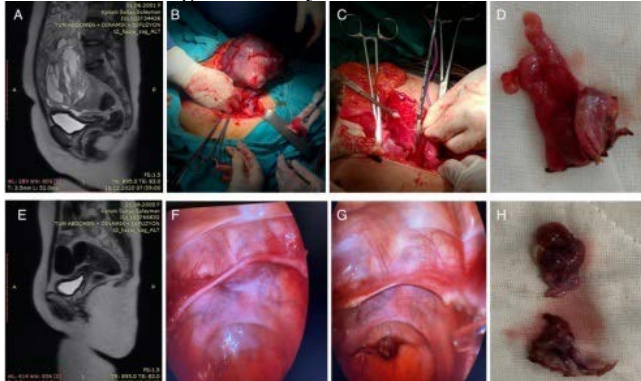
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Swyer Syndrome is a sex reversal disorder characterized by 46 XY karyotype, a normal female phenotype with normal Mullerian structures presenting as delayed puberty, inadequate development of secondary sexual characteristics, and amenorrhea. We describe a case involving two affected sisters born to a consanguineous couple with two different scenarios where the patients were investigated from clinical, radiological, endocrinologic, and genetic aspects. Index case - A 19-year-old female patient was admitted with the main complaint of unbearable abdominal pain additionally having a history of primary amenorrhea. The physical examination and hormonal profile demonstrated hypergonadotropic hypogonadism and elevated serum tumor markers. The radiological imaging revealed a massive pelvic mass and hypoplastic uterus. Histopathology of the pelvic mass resulted as a malignant mixt germ cell tumor FIGO stage IIIA. After tumor-free debulking surgery, she was referred to a medical oncology unit where four cycles of chemotherapy were applied with bleomycin, etoposide, and cisplatin (BEC). The family history unearths elder sister at age twenty had similar aspects such as primary amenorrhea and the same physical semblance as with her sister. Prophylactic laparoscopic bilateral gonadectomy and salpingectomy was performed. Chromosome karyotype analysis of the two sisters revealed 46, XY which led to our diagnosis of Swyer syndrome. The family has been given counseling about their situation and advised for other siblings to be evaluated.

Keywords: Debulking, Familial Swyer Syndrome, Karyotype, Mixed Germ Cell Tumor, Primary amenorrhea

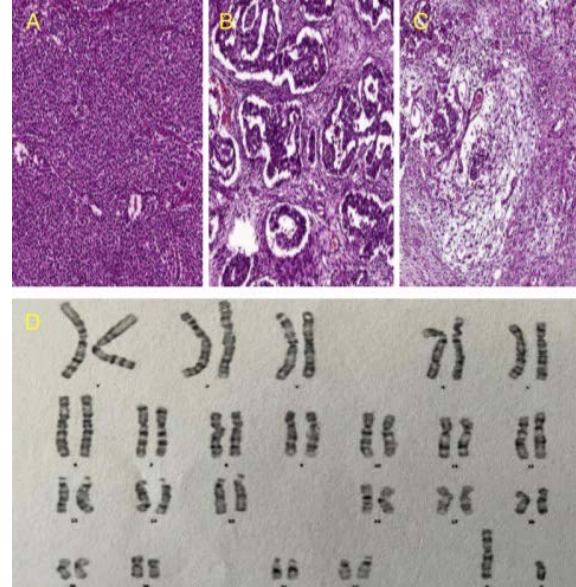
CE-MRI findings and laparotomic observation of adnexal mass and uterus of the Index Case, CEMRI findings, and laparoscopic observation with gonadectomy of the Elder sister



A) CE-MRI at the T2-A series showing infantile uterus and abdominal pelvic mass (17x18x19 cm) which contain calcifications and minimal papillary projections of the Index case B) Torsioned massive 20 cm ovarian mass with cystic and hemorrhagic areas originated from left adnexa of the Index case C) Hypoplastic and bicornuate shaped uterus of the Index case D) Streak and infantile right ovary of the Index case E) CE-MRI at the T2-A series showing hypoplastic uterus

without any adnexal mass of the Elder sister F) Laparoscopic image of the hypoplastic uterus of the Elder sister G) Laparoscopic image of gonadectomy of the Elder sister H) Bilateral streak and infantile gonadectomy and salpingectomy of the Elder sister 247x149mm (144 x 144 DPI)

Histopathology of left ovary and karyotype analysis of the Index Case



A) Dysgerminoma. H and E staining, original magnification $\times 100$. B) Yolk sac tumor: H and E staining, original magnification $\times 100$. C) Embryonal carcinoma tumor: H and E staining, original magnification $\times 100$. D) Chromosomal analysis of the Case 1 showing 46, XY karyotype 141x145mm (144 x 144 DPI)

EP-099 [Onkoloji]

A rare case of postmenopausal adnexal mass

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AIM: Ovarian cancer represents 4% of all female cancers, and more than half of the cases are detected in postmenopausal period. But non-gynecological malignancies should also be kept in mind in evaluating adnexal masses.

Case presentation: A 59-year-old women, presented to our institution with an adnexal mass which was detected during routine gynecological follow up. In her medical records she had a history of papillary thyroid cancer and her mother had died because of serous ovarian cancer, with negative germline BRCA testing. In the transvaginal ultrasonography a thick-walled, lobulated contoured, tubular cystic lesion measuring 86*38 mm was observed in the right adnexal area (Figure 1) and tumor markers were below their upper limits (cancer antigen-125 =8.7 U/ml). Because of her medical history a laparotomy was decided for the mass with these findings. During intraoperative exploration both adnexa were normal, and the uterus was multiple myomatous. However, a tubular, fluid-filled, tight, 8

cm lesion was detected in the appendix adjacent to the right ovary (Figure 2). Appendectomy was performed and intraoperative pathology examination revealed a suspicion of low-grade mucinous neoplasia of the appendix. Afterwards in the systemic abdominal examination, another 5 cm nodular, hard, fluffy, indurate lesion, which may be compatible with the implant, was detected in the ileum meso (Figure 3). The implant was also resected. The final pathology result was reported as low-grade mucinous neoplasia of the appendix and paraganglioma of in the ileum meso. The patient was consulted to gastroenterological surgery, medical oncology and genetics departments.

CONCLUSION: Postmenopausal adnexal masses should be evaluated carefully. Despite a good anamnesis, radiological and laboratory evaluation in the preoperative period is important in masses with postmenopausal adnexa. Also, non-gynecological malignancies like in our case, should also be kept in mind in evaluating adnexal masses. For this, a good intraoperative abdominal exploration is very valuable.

Keywords: Postmenopausal, Adnexal mass, Appendix, Paraganglioma, Case report

figure-1



ultrasonographic image of adnexal mass

figure-2



Intraoperative view of the mass detected in the appendix

figure-3



image of paraganglioma in the ileum meso

EP-100 [Onkoloji]

Primary Pulmonary Choriocarcinoma, A Rare Entity

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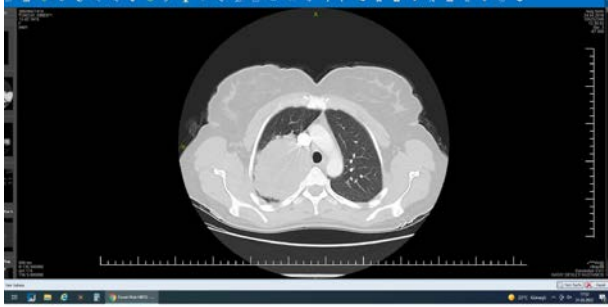
39-year-old patient presented to the obstetrics and gynecology outpatient clinic with the complaint of oligomenorrhea in April, 2018. She previously had 3 vaginal term deliveries and one spontaneous abortion. In the last 1 year, she had a menstrual cycle every 3-4 months. On the transvaginal ultrasonography uterus was normal, endometrium was thin (4 mm) and bilateral ovaries were atrophic. Relevant laboratory values were FSH: 3,83; LH: 4,18; and B-Hcg:20242. There was no ectopic pregnancy focus during the ultrasonographic evaluation. Diagnostic laparoscopy was performed on the patient who also wanted tubal sterilization. There also wasn't any ectopic pregnancy focus during the laparoscopy. Next, salpingectomy and P/C were performed on the patient. Endometrial pathology report came back with "proliferative endometrium". We used CT to scan for malignancy and found 8 cm mass on the right lung. Subsequently, PET scan was utilized but there was no other malignancy focus. Biopsy of the lesion from the lung was taken and it showed profound necrosis. Empirical chemotherapy was initiated to the patient by the oncology department but tumor was unresponsive to the treatment. In June, 2019 segmental resection was performed, and pathologic specimen identified the mass as "Pulmonary Choriocarcinoma". The patient was diagnosed as primary pulmonary choriocarcinoma and was started on gemcitabine+paclitaxel regimen.

Although pulmonary metastasis of choriocarcinoma originating from the gonads is common, primary pulmonary choriocarcinoma is an extremely rare entity. There are various theories about its mechanism in the literature: Spontaneously regressed primary gonadal choriocarcinoma metastasis; years later finding of trophoblastic

embolism at birth; abnormal migration of primordial germ cells during embryogenesis are some of these theories. The prognosis of primary pulmonary choriocarcinoma is extremely poor. There is no optimal treatment, but the most effective treatment is accepted as surgical treatment after chemotherapy. There are 55 cases in the literature to this date and the average lifespan of the patients is reported as 8 months.

Keywords: Choriocharcinoma, Oligomenorrhea, Pulmonary

CT Of Tumor



8 cm mass at right lung

EP-101 [Onkoloji]

Can we predict cancer before any symptoms? Let's see our observation in our cases

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INTRODUCTION: One in 1000 to one in 1500 pregnancies are complicated by cancer. We would like to show three cases in our institution how we discover cancer in pregnancy, although patients did not have any symptoms before pregnancy.

METHODS: CASES 1: 29-year-old women, healthy women in 10 weeks gestation did Prenatal test, Livia, and they could not do analysis because they could not extract fetal blood. All her laboratory and pregnancy were in normal limit.

CASE 2: 33-year-old pregnant women in 10 weeks of gestations did Prenatal test, Veracity, and laboratory could not extract fetal blood. She was healthy with previous laparoscopic operation due endometriosis on the left side on ovary.

CASE 3: 42-year-old pregnant women in 10 weeks of gestation did Prenatal test, NIFTY, and laboratory could not extract fetal blood. In previous history she had operation of breast cancer and chemotherapy 4 years ago.

RESULTS: Case 1: Patient at 36 weeks of gestation patient had big palpable mass on site liver and we performed, Caesarean Section and discovered carcinoma of colon sigmoid with multiple metastasis in abdomen. The newborn was in good condition and she lived one year later. CASE 2: Patient at 33 weeks of gestation patient had pain in her legs. Detail examination showed changes on all bones of patients suspected

on metastatic changes. We performed Caesarean Section, urgently, and we found Krukenber's tumor and multiple metastasis in abdomen. The newborn was healthy and she lived for one month later.

CASE 3: Patient at 16 weeks of gestation patient had pain in abdomen and ascites. We did an open laparotomy and found colon cancer with meta changes in abdomen. Caesarean Section was performed in 33 weeks of gestation. Two newborns were healthy and she is alive.

CONCLUSIONS: Patients were healthy before pregnancy and Prenatal tests showed large changes in their karyotypes in terms of multiple mitoses. At the time of obtaining the results, neither the patients nor the doctors suspected they have cancer. Based on these cases, our idea is whether karyotype analysis can be an adequate test to find suspicious cancer changes in anyone before the symptoms of the disease develop. If yes, we have revolutionary discovery. If not, maybe further more investigations in field of genetic analysis can give us answers.

Keywords: Cancer, Prenatal tests, Karyotype

EP-102 [Onkoloji]

A Rare Case of Primary Fallopian Tubal Serous Cancer with Normal CA125 Level and The Difficulty of Radiologic Diagnosis Preopetively

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AIM: Primary fallopian tube cancer is a rare form of the female cancers. The aim of this case report to show the rare disease and that its radiologic findings are difficult to make distinction preoperatively.

Material METHOD: Case report

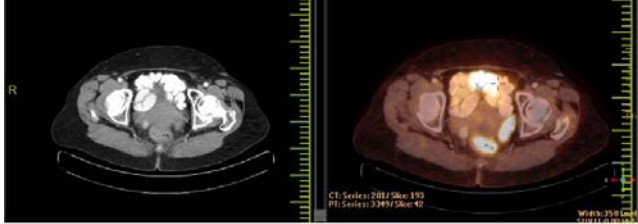
FINDINGS: We present a 67-year-old, postmenopausal women who had complaint of vaginal discharge and was referred to our hospital after a mass was detected during the general controls performed in another hospital. The pelvic examination revealed a normal sized retroverted uterus with no cervical motion and adnexal tenderness. Speculum examination showed vaginal discharge. Transvaginal ultrasound showed uterus retrovert and both of ovaries atrophic. In endometrial space a 27x15mm submucous lesion originating from the uterine fundus was observed on ultrasound. Free fluid was not seen in the abdomen. Tumor markers were normal. In pap smear examination was shown inflammation, malignancy negative and human papilloma virus negative. Her endometrial sampling result was spindle cell lesion with mild atypia. We perform emission tomography (PET-CT) with the suspicion of sarcoma. The report mentioned that minimally increased FDG uptake in the uterine cavity. Significant FDG uptake was not observed in cystic lesion areas observed in bilateral adnexal lobes. Diffuse FDG concentrations were seen throughout the descending colon-sigmoid colon and rectal locus (SUDmax: 12.6) that is thoughts as a inflammation. Intraop abdominal exploration there was no pathological finding except that the left tuba was hydropic and stiff appearance. Frozen examination was benign straiomal tumor in the uterus, due to intensive inflammation of the tuba, a definitive diagnosis would be given in paraffin examination. The operation was ended as total abdominal

hysterectomy, bilateral salpingo-oophorectomy and abdominal washing fluid sampling. The definitive diagnosis of the material was reported that there was a 5*1,5 cm high grade serous carcinoma located in the left tuba, whose surface and lymphovascular space invasion positive and the other parts had contained benign changes. We planned for a second operation, and did a new work up. In magnetic resonance imaging, there were an extrarenal pelvis variation in the left kidney and no finding of tumor residue or lymphadenopathy. Endoscopic and colonoscopic examination resulted as benign. In second operation, bilateral pelvic paraaortic lymph node dissection supracolic omentectomy, peritoneal biopsy and washing were performed. The patient was discharged on the 6th postoperative day without any complications. Final pathology showed that removed 18 pelvic and 6 paraaortic lymph nodes, omentum and peritoneal biopsy were evaluated as negative for malignancy. The patient was consulted to medical oncology for the chemotherapy.

RESULT: Primary fallopian tuba cancer is a rare female cancer. Preoperative radiologic findings can be confused with other close organ pathologies. That may not be the first thing that comes to mind in the differential diagnosis firstly. Like our case CA125 level can be normal. Persistent vaginal discharge especially in postmenopausal patients may a remarkable finding for us.

Keywords: serous cancer, fallopian tube, primary cancer

picture 1: The image of the lesion in PET-CT



EP-103 [Onkoloji]

Multiple organ metastatic cancer of the cervix; bladder, rectum, and eventually breast

Ulaş Çoban

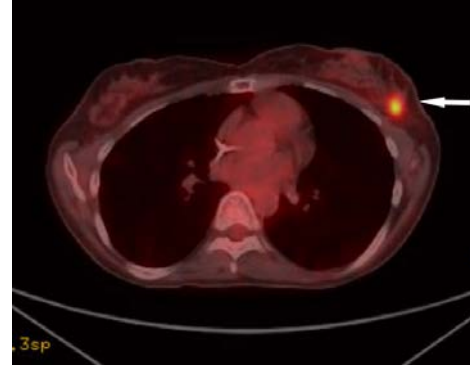
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AIM: Cervical carcinoma is a very frequent health problem in women and according to GLOBOCAN published in 2021, breast cancer and cervical cancer are the first commonly diagnosed cancer and leading causes of mortality through cancer in women, respectively, followed by lung cancer (1). Cervical adenocarcinoma frequently causes additional organ metastases mostly extra pelvic lymph nodes, lungs, liver, and bones (2). Breast metastasis of cervical cancer is extremely rare and is limited to case reports in the literature (3). Also, it is important and challenging to differentiate primary breast malignancy from metastatic to avoid unnecessary breast surgery to get the proper treatment immediately (4). This study aimed to present our patient's findings and treatment who has a breast metastasis of cervical adenocarcinoma. **METHOD:** A 35-year-old female patient had undergone radical hysterectomy+bilateral salpingo-oophorectomy+omentectomy 7 years ago for cervical adenocarcinoma, and transurethral resection for bladder metastasis 2 years later from the first operation. After the

second operation, the medical oncology department performed systemic chemotherapy and local radiotherapy. A rectal metastasis was detected in a PET-CT scan and a colostomy was performed for mechanical intestinal obstruction in the follow-up period. The patient was admitted to our clinic because of a palpable mass lesion in her left breast. **RESULTS:** On physical examination, two firm fixed masses about 1 cm in diameter were palpated in the upper outer quadrant of the left breast. PET-CT showed high FDG uptake of the lesion in the left breast. In addition, high uptake was observed in the bladder wall and rectum posterior wall. It was decided to perform a biopsy on the breast by the multidisciplinary gynecooncology council. As a result of trucut biopsy, it was reported as cervical adenocarcinoma metastasis. In the immunohistochemical examination, tumor cells were found to be p16, CEA, EMA, and Pax8 positive, GATA-3, GCDFFP-15, Mammoglobin, D240, p63, Progesterone receptor, c-erbB2 negative. Estrogen receptor was weakly positive, and Ki-67 proliferation index was 30%. It was decided by the council that the patient should be given systemic chemotherapy and followed up. **CONCLUSION:** Although breast metastasis of cervical cancer is quite rare; It should be kept in mind that this possibility also exists, especially among surgeons dealing with gynecooncology. Breast examination should be done completely in these patients.

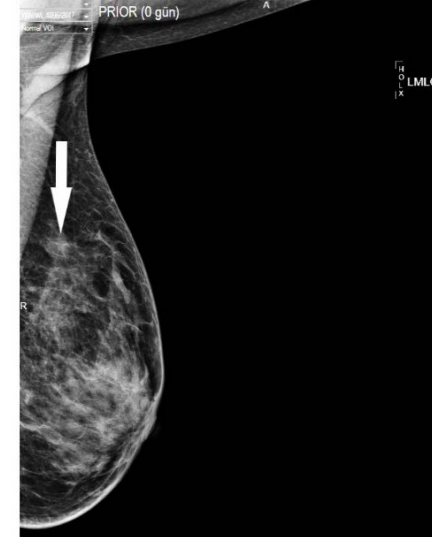
Keywords: cervix adenocarcinoma, breast metastasis, gynecologic metastasis

Breast metastasis of cervix adenocarcinoma on PET-CT scan



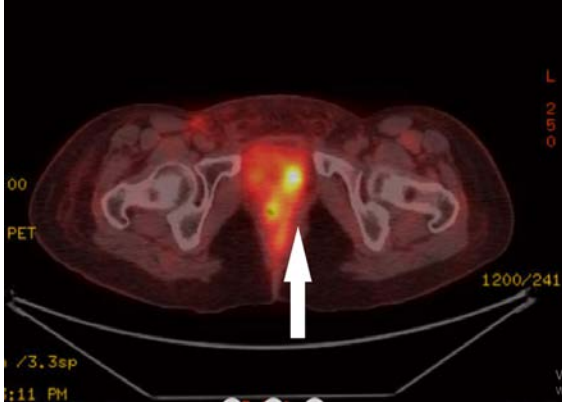
FDG uptake of breast metastasis is detected on PET-CT scan

Left mammography



Mammographic image of the breast metastasis

Rectum metastasis of cervix adenocarcinoma on PET-CT scan



FDG uptake at the posterior wall of rectum metastasis is detected on PET-CT scan

EP-104 [Onkoloji]

Does Resveratrol Have a Protective Effect on Cisplatin Induced Damage in Rat Ovary?

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OBJECTIVES: It is aimed to evaluate the protective effect of resveratrol on cisplatin-induced damage in rat ovary.

METHODS: A total of 30 female Wistar-Albino rats were utilized to form three groups: Group 1 (control group), 1 mL of 0.9% NaCl (saline) were administered. Group 2 (cisplatin group), 7.5 mg / kg cisplatin was given. Group 3 (cisplatin + resveratrol group) 7.5 mg / kg cisplatin and 10 mg / kg resveratrol were given. Ovaries were extirpated in all groups and prepared for biochemical analysis and histopathological examination. Malondialdehyde (MDA) levels and activities of catalase (CAT) and superoxide dismutase (SOD) were studied. Also, ovarian tissue damage was scored by examining the slides prepared from ovarian tissue with light microscopy and immunohistochemistry (Figure 1,2).

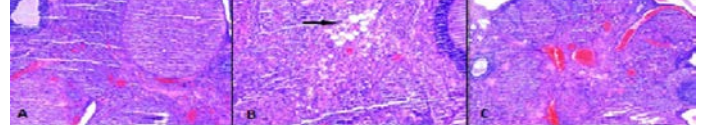
RESULTS: Histopathological damage was significantly higher in group 2 than in other groups ($p < 0.05$) (Table 1). Resveratrol administration led to an improvement in the injury scores. The MDA levels were significantly higher, and the activities of SOD and CAT were lower in the cisplatin group than in the cisplatin + resveratrol group ($p < 0.05$)

(Table 2).

CONCLUSION: Resveratrol reduces ovarian injury and enhances biochemical changes on cisplatin-induced damage in rat ovary.

Keywords: Cisplatin, Ovary, Rat, Resveratrol

Figure 1. Light microscopic appearance of ovary.



(A) Minimally fibrosis and congestion in the ovarian stroma of the rat from the control group (H&E, X50). (B) Lipoid cell storage (arrow), fibrosis and lymphocyte infiltration in the ovarian stroma of the rat from the cisplatin group (H&E, X100). (C) Mild fibrosis, congestion and lymphocyte infiltration in the ovarian stroma of the rat from the cisplatin + resveratrol group (H&E, X50).

Figure 2. Immunohistochemical staining of rats by using c-kit (cd117).



(A) Negative staining with c-kit (cd117) in the ovary of the rat from the control group (x100). (B) < Focal % 10 staining with c-kit (cd117) in the ovary of the rat from the cisplatin group (x100). (C) < Focal % 10 but less than cisplatin group staining with c-kit (cd117) in the ovary of the rat from the cisplatin + resveratrol group (x100).

Table 1. Distribution of histopathologic findings.

Groups (n = 10)	Pigmentation	Inflammation	Fibrosis	Congestion	Hemorrhage
Control	0	0	0	0	0
Cisplatin (7.5 mg/kg)	2*	2*	1*	2*	2*
Cisplatin+resveratrol (7.5 mg/kg+10 mg/kg)	1*	1*	0*	1*	1*

* Significant difference ($p < 0.05$) between groups 2 and 3.

Table 2. Distribution of blood levels of malondialdehyde (MDA), superoxide dismutase (SOD) and catalase (CAT).

Groups (n = 10)	MDA (nmol/mg) \pm SD	SOD (U/mg) \pm SD	CAT (U/mg) \pm SD
Control	3.22 \pm 0.14	30 \pm 2.7	65 \pm 4.3
Cisplatin (7.5 mg/kg)	8.14 \pm 0.45*	12 \pm 0.9*	17 \pm 1.5*
Cisplatin+resveratrol (7.5 mg/kg+10 mg/kg)	5.02 \pm 0.22*	19 \pm 1.6*	37 \pm 2.9*

MDA means malondialdehyde, SOD means superoxide dismutase, CAT means catalase. * Significant difference ($p < 0.05$) between groups 2 and 3.

EP-105 [Onkoloji]

Ovarian Preservation in Endometrial Cancer

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SBÜ Ankara Etlik Zübeyde Hanım Kadın Hastalıkları Eğitim ve
Araştırma Hastanesi

AIM: Endometrial cancer is considered as a postmenopausal women's disease, but recent studies show that about 4% of all endometrial cancers can be seen in women aged under 40. The treatment is typically hysterectomy and bilateral oophorectomy, and lymphadenectomy can be added with tumoral risk factors. A major concern and debate are the safety of ovarian preservation in premenopausal endometrial cancer patients. The long-term benefits of ovarian preservation such as on cardiovascular diseases and osteoporosis is important for the quality of life of these patients. In this study we aim to show the frequency and the risk factors related to ovarian involvement in patients with endometrial cancer younger than age 50.

METHODS: Patients treated with endometrial cancer between the years 1992 -2019 in Etlik Zübeyde Hanım Women's Health Teaching and Research Hospital were retrospectively evaluated. Patients age 50 and below were included in the study. Patient characteristics and ovarian involvement were evaluated using SPSS.

RESULTS: A total number of 161 patient's record were available for the study. Ovarian metastasis was detected in 8 % of patients under the age of 50, and synchron ovarian tumor was detected in 1.8%. In the logistic regression model, lymphovascular space invasion (LVSI), cervical stromal invasion and endocervical glandular involvement were more likely to show ovarian involvement. There were no differences in ovarian involvement between the age groups under 45 and 45-50 years ($p>0.05$). In 13 patients with ovarian metastasis only 7 had abnormal ovarian morphology. Palpable metastatic lymph node was detected in 3 patients with intraoperative macroscopically normal appearance, and diffuse peritoneal and omental involvement was detected in 1 patient. In 2 of the patients only microscopic ovarian involvement was detected. No microscopic ovarian metastasis was detected under the age of 45.

CONCLUSION: In patients under the age of 50 ovarian involvement is probably to occur in patients with tumors which have LVSI, cervical stromal invasion and endocervical glandular involvement. In premenopausal patients with endometrial cancer, patients can be offered ovarian preservation with intraoperative findings.

Keywords: endometrial cancer, ovarian preservation, ovarian metastasis

Table 1 Univariate analysis of coexisting ovarian malignancies with respect to clinicopathologic risk factors

Variables	No coexisting malignancy	Coexisting malignancy	P value
Age			0.081a
≤ 45	70 (95.9)	3 (4.1.)	
>45	75 (88.2)	10 (11.8)	
Histologic subtype			0.001 b
Endometrioid	127 (95.5)	6 (4.5)	
Non-endometrioid	18 (72)	7 (28)	
Histologic Grade			0.000 b
1	116 (96.7)	4 (3.3)	
2	17 (81.0)	4 (19.0)	
3	12 (70.6)	5 (29.4)	
Stage			0.000 b
Evre 1	129 (99.2)	1 (0.8)	
Evre 2	1 (100)	0 (0)	
Evre 3	11 (50)	11 (50)	
Evre 4	3 (75)	1 (25)	
Myometrial invasion. %			0.000 b
No myometrial invasion	54 (96.4)	2 (3.6)	
<%50 Myometrial invasion	81 (94.2)	5(5.8)	
>%50 Myometrial invasion	9 (75)	3 (25)	
Serosal invasion	1(25)	3 (75)	
LVSI			0.000 b
Yes	12 (64)	7 (36)	
No	133 (96.7)	6 (4.3)	
Endoservical glandular involvement			0.078 b
Yes	4 (66.7)	2 (33.3)	
No	141 (92.8)	11(7.2)	
Cervical stromal invasion			0.000 b
Yes	6 (50)	6 (50)	
No	139 (95.2)	7 (4.8)	

a: p value for Chi-Square b: p value for Fisher's Exact Test.

Table 1 Univariate analysis of coexisting ovarian malignancies with respect to clinicopathologic risk factors

Variables	No coexisting malignancy	Coexisting malignancy	P value
Metastases to pelvic lymph nodes			0.000 b
Yes	12 (60)	8 (40)	
No	133(96.4)	5 (3.6)	
Metastases to para-aortic lymph nodes			0.000 b
Yes	6 (50)	6 (50)	
No	139 (95.2)	7 (4.8)	
Omental involvement			0.000 b
Yes	4 (80)	1 (20)	
No	141 (92.2)	12 (7.8)	
Cytology			0.044 b
Positive	2 (50)	2 (50)	
Negative	124(91.9)	11 (8.1)	

a: p value for Chi-Square b: p value for Fisher's Exact Test.

Table 2: Multivariate analysis for coexisting ovarian malignancy with respect to clinicopathologic risk factors

Variables	OR	95% C.I.	P value
LVSI	54,565	(2,215-1344,34)	0,014
Cervical stromal invasion	609,652	(3,612-102910,73)	0,014
Endoservical glandular involvement	0	(0-0,341)	0,025

**OR,odds ratio; CI,confidence interval

Table 3 Details of patients with a metastatic ovarian malignancy

Patient	Age	Site	Histologic subtype	Grade	Figo Stage	LVI	Sitology	Endoservical glandular involvement	Cervical stromal invasion	Ovarian morfoloji	Major Intraoperative findings
M1	48	BO	E	2	3A	+	Positive	-	-	Anormal	LO, 7*9 cm cystic and solid; RO, 4*5cm cystic and solid
M2	47	Bilateral parametrium	E	2	3B	+	Negative	-	-	Normal	-
M3	43	BO	K	1	3A	+	Negative	-	-	Anormal	Bilateral TOA
M4	47	RO	E	1	3A	-	Negative	-	-	Normal	-
M5	49	BO	E	1	3A	-	Negative	+	-	Anormal	RO, 5x6 cm cystic and solid; LO, 10x15cm cystic and solid
M6	50	RO	Mixed	2	3A	+	Negative	-	-	Anormal	RO, 5x6 cm cystic and solid
M7	42	BO	E	1	3C1	-	Negative	+	-	Anormal	RO, tumoral implant; Paraortic palpable multiple LN mets
M8	46	BO	Mixed	3	3C1	+	Negative	-	-	Anormal	LO, 7* 6 cm cystic; RO 4*4 cm cystic; Omental seeding; Pelvic palpable LN mets
M9	33	LO	K	3	3C2	-	Positive	-	-	Normal	Left cornual surface, 5*5 cm multilobular tumoral vegetation, Paraortic palpable multiple LN mets, Acid
M10	47	BO	K	1	4A	+	Negative	+	+	Normal	Tumor infiltrates extending to the spleen; Omental seeding; Peritoneal seeding; acid
M11	48	LO	U	3	3C2	-	Negative	+	-	Normal	Palpable paraaortik lnd
M12	48	RO	E	3	4B	-	Negative	+	-	Normal	Peritoneal seeding, Pelvic- Paraortic palpable multiple LN
M13	44	BO	E	2	4B	+	Negative	+	+	Anormal	Both ovaries larger than normal, Omental seeding, Pelvic- Paraortic palpable multiple LN

****E**, endometrioid; **K**, karsinosarcom; **M**, mikst; **RO**, right ovary; **LO**, left ovary; **BO**, both ovary; **BP**, bilateral parametrium.

EP-106 [Onkoloji]

Spontaneous rupture of a Krukenberg tumor in an adolescent girlYağmur Soykan¹, Aydın Yavuz², Esra İşçi Bostancı¹¹Department of Obstetrics and Gynecology, Division of Gynecologic Oncology Gazi University Faculty of Medicine, Ankara, Turkey²Department of General Surgery, Gazi University Faculty of Medicine, Ankara, Turkey

BACKGROUND: The signet ring cell carcinomas of the stomach rarely metastasize to the ovaries. Metastatic ovarian tumors are uncommon entities in adolescent ages.

CASE: We report a case of signet ring cell tumor's rupture of the left ovary in a 19-year-old woman who presented with abdominal discomfort. Ultrasound examination showed an approximately 25x19x15 cm left-sided ovarian mass with mainly solid components, and detected free intraperitoneal fluid with fragmented solid mass. Hematological tests revealed slight anemia hemoglobin: 10.7g/dL, CA125: 1119,2 U/mL, CA19.9: 3296 U/mL, CA72-4 >300 U/mL, AFP: 389,9 ng/mL, LDH: 2904 U/L the tumor markers were all higher than normal limits.

An abdominal CT scan showed a heterogeneous mass lesion with cystic areas, approximately 19x14x21 cm in size, filling the pelvic region and up to the umbilicus level was observed. Heterogeneity was observed in free fluid and fat planes in the abdomen (rupture?) In the left adrenal gland, a heterogeneous fat mass of 3.5x2.5 cm was observed. Vertebral corpus densities appear to be heterogeneous in places (metastasis?).

Emergent surgery was required through the findings of the abdominal examination such as tenderness with guarding and presence of rebound. Unilateral (left) ovary was carried out and sent for the intraoperative frozen section as a malignant epithelial tumor with negative peritoneal cytology. Approximately 3 cm of solid mass was palpated in the stomach during exploration. Widespread miliary tumor implants were seen on the liver, meso ileum, and diaphragm. An omental biopsy was performed, and then the operation terminated because optimal cytoreductive surgery was impossible.

The patient's postoperative course was uneventful, and she was discharged on postoperative day seven. The pathology revealed a signet ring cell carcinoma of the ovary.

Adjuvant chemotherapy was planned by the medical oncology department.

Summary and CONCLUSION: This case highlights the need to perform a comprehensive examination in the differential diagnosis of girls at younger ages who present with weight loss, abdominal discomfort and an abdominal mass. Early intervention might prevent the development of metastasis and other sequelae associated with this case.

Keywords: Adolescent, Krukenberg tumor, Signet ring cell carcinoma

B



The resected left ovary measured 22 x 15 cm in size

Fig. 1. A



Intraoperative view of the right adnexal solid mass 4 x 3.5 cm in size.

EP-107 [Onkoloji]**Clear Cell Borderline Ovarian Tumor Progressing To Invasive Carcinoma: A case report**

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Ovarian cancer is the one of the most mortal gynecological cancer worldwide. Borderline tumors constitute approximately 10-20% of all epithelial ovarian neoplasms. This group of tumors are generally non-invasive cancers and have a good prognosis and rarely require systemic therapy. However borderline tumors, in some cases may progress to invasive carcinoma. In this article, we aimed to present a patient who had borderline clear cell ovarian tumor treated in our clinic and progressed to clear cell carcinoma in the follow-up period. A 38 years old, gravida 3, parity 3, woman diagnosed with a 9 cm diameter cystic mass with a solid component in the right adnexal area during routine gynecological examination, and a right salpingoopherectomy and omental biopsy was performed in August 2016. The pathology result was reported as borderline clear cell tumor with microinvasion and she had followed up monthly. Approximately one year after the patient's first surgery, she had undergone laparotomy due to suspicious findings with recurrence on MRI. No tumoral lesion was observed intraoperatively, omental and peritoneal biopsies were obtained. She was advised to routine follow-up since there was not any malignancy in the pathological specimens. The patient, who had a complaint of right inguinal pain in the follow-up period, had findings consistent recurrence in the pelvic MRI and Pet-CT, she had undergone relaparotomy. Total abdominal hysterectomy + left salpingoopherectomy + total omentectomy + bilateral pelvic paraaortic lymph node dissection were performed in February 2021. Approximately 3 cm of tumoral mass in the right parauterine area and conglomerated lymph nodes in the right internal iliac and obturator area were observed. The mass in the right parauterine area was reported as clear cell carcinoma and carcinoma metastasis of the lymph nodes in the final pathology report and the patient was referred to the medical oncology department to receive further medical treatment. Although patients with borderline ovarian tumors have an excellent prognosis, there is a risk of progression to invasive carcinoma. Therefore the patients with borderline ovarian tumors should be followed carefully and regularly, especially if they are accompanied by risk factors for progression to invasive carcinoma.

Keywords: Borderline clear cell carcinoma, Invasive Carcinoma, Progression

EP-108 [Perinatoloji]**Prenatal diagnosis of thoracoabdominal type ectopia cordis with hypoplastic left heart syndrome: a rare congenital heart disease**

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Objective: Ectopia cordis (EC) is a rare congenital disorder in which the fetal heart is detected partially or completely outside the thorax. It is seen with a frequency of 5.5–7.9 per 1 million births and at a rate of 0.1% among congenital heart diseases. Here we present a rare case of thoracoabdominal type EC that was diagnosed in the third trimester which was not part of the Pentalogy of Cantrell and was accompanied by hypoplastic left heart syndrome (HLHS).

Case Report: A 37-year-old multigravid patient from Djibouti was referred to our perinatology out-patient clinic in the 33th week of pregnancy due to fetal cardiac anomaly. There was no regular antenatal follow-up and antenatal screening tests. There was no history of teratogenic agent or drug use, radiation exposure, trauma or antenatal infection in this pregnancy. In fetal anatomical scanning, we found a lower chest and upper abdominal ventral wall defect with an almost complete herniation of the heart through the thoracic cavity. Left hepatic lobe was also seen bulging through the lower part of midline defect. Both diaphragms were intact. In fetal cardiac examination, atrial situs, pulmonary and systemic venous returns were normal. In the 4-chamber view, the left ventricle and atrium was hypoplastic. The right ventricle formed the apex of the heart. Atrioventricular and ventriculoarterial connections were concordant. Mitral and aortic valves were atretic and minimal antegrade flow was observed. Aortic arch was tubular hypoplastic from the level of valve to the isthmus. The opening of the foramen ovale was decreased and its movements were limited. The shunt was seen to be from left to right. Persistent left superior vena cava was present. Reverse flow was observed in the ductus arteriosus. HLHS was considered with the present findings. No extracardiac additional anomaly was observed. Genetic analysis were recommended and termination option was offered. However, she refused genetic examination and preferred the continuation of the pregnancy. An emergency cesarean delivery was performed due to the onset of labor at 35 weeks and 4 days, and 2 previous cesarean sections. A baby girl with a weight of 2400 grams was delivered. The baby was taken into operation immediately. No tissue or pericardium was observed on the heart. The sternum was present but short. Aorta and left ventricle were hypoplastic. Wide patent ductus arteriosus was observed. Both left and right superior vena cava were observed. There was no defect in the bilateral diaphragm. A stepwise surgery decision was made. First, the heart was placed in the mediastinum. In the same session, the abdominal defect was closed by pediatric surgeons. Upon the development of intraoperative cardiac arrest, resuscitation was done and the patient was taken to the intensive care unit with ECMO support. The patient died due to cardiac arrest at the postoperative 48th hour.

Conclusion: Although it is a rare condition, HLHS can be seen in cases of ectopia cordis. EC is often a component of the Pentalogy of Cantrell but may be seen as isolated. Prognosis depends on the type of the lesion and associated anomalies but it is generally poor and mortality rates are very high.

Keywords: ectopia cordis, hypoplastic left heart, Pentalogy of Cantrell

figure 1



Figure 1: Sagittal ultrasonographic image of fetal trunk showing lower chest and upper abdominal ventral wall defect with herniation of the heart through the thoracic cavity.

figure 2



LA: left atrium, LV: left ventricle, RA:right atrium, RV:right ventricle, RSVC:right superior vena cava, Ao: aorta, PA:pulmonary artery, PLSVC: persistant left superior vena cava.

figure 3



Figure 3: Postnatal image of live born baby

EP-109 [Perinatoloji]

Cesarean myomectomy of giant myoma uterines, case series

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Postpartum hemorrhage(PPH) is still one of the most common causes of maternal mortality and morbidity. Especially uterine atony is the most leading cause of PPH. In the literature; myomectomy during cesarean surgery is still controversial whether causing atony or not. In some retrospective studies while it seemed to be a safe procedure, there was no information about giant myomas and pregnancy outcome. In this report, we aimed to discuss two patients that had cesarean myomectomy of giant myomas in our tertiary center. Patient 1 was 28 year-old,primigravid, realised her pregnancy during preoperative period of myomectomy. At ultrasound myoma was 17 x 18 centimeters, dominant to be subserosal. Patient 2 was 43 year-old, had a cesarean birth 12 years ago, with an intramural myoma of 25x20 centimeters. Patients had uneventful pregnancies and did not have preterm labour. Both of patients had cesarean myomectomy at 38 weeks. At surgery, after upper and lower umbilical incision, lower segment incision was done for cesarean birth. After removal of placenta, to control the blood loss bilateral hypogastric artery were clamped transiently. By transmural approach myomectomy was done and incision site were sutured optimally. Oxytocin and methergine were given in routine doses. After removal of the clamps of the arteries, bleeding control was done and surgery was ended. Birth weights of patient 1 and 2 were 2480 and 2800 grams. Weight of myoma of patient 1 and patient 2 were 2600 and 3110 grams, operation time were 50 and 100 minutes, no transfusion needed; 4 units of erythrocyte and 4 units of fresh frozen plasma transfusion were given totally respectively. Patients were recovered and discharged after 72 hours uneventfully. Pathology reports were compatible with myoma uteri. Cesarean myomectomy can be safe and need for hysterectomy due to abnormal blood loss reduced by our surgical technique but further studies needed.

Keywords: cesarean myomectomy, giant myoma, hypogastric artery ligation

Figure 1: Patient 1 with subserosal myoma uteri

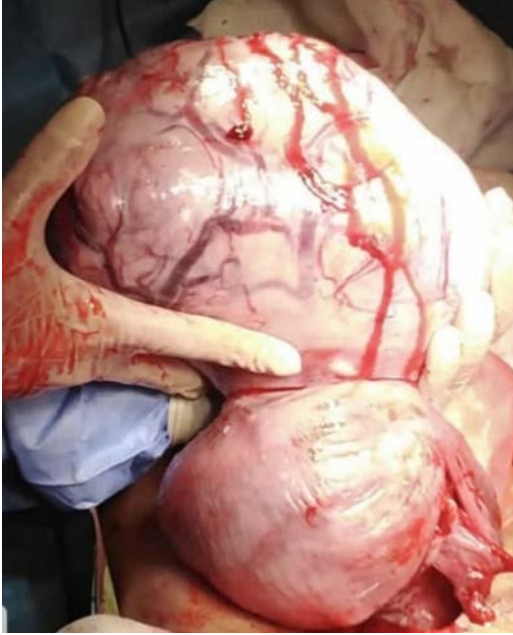
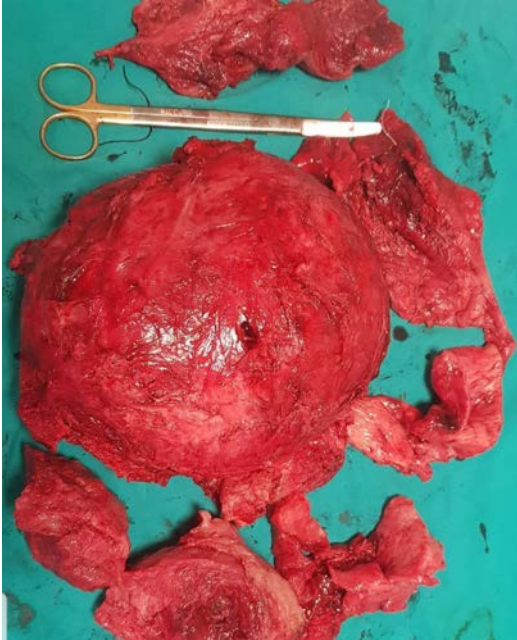


Figure 2: Patient 2 with an intramural myoma uteri



EP-110 [Perinatoloji]

Recurrent spontaneous twin cesarean scar pregnancy after previous cesarean scar pregnancy: a case report

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OBJECTIVE: To evaluate the diagnosis, differential diagnosis, and treatment approach of spontaneous cesarean scar twin pregnancy, a very rare form of cesarean scar pregnancy (CSP) classified as non-tubal ectopic pregnancy, the prevalence of which is increasing due to the rising proportion of cesarean deliveries.

METHOD: Case report

CASE: A 30-year-old woman, gravida 4 para 2 (caesarean section), with a history of a previous CSP, complaining of an approximately two-week delay in menstruation and vaginal bleeding, was admitted to our department. She had normal vital signs and comfortable abdomen. The uterus and adnexa were normal on sonographic examination. No free fluid was noted in the pelvis. No gestational sac was observed in the endometrial cavity or cervical canal. Sliding sign was not detected. A monochorionic-diamniotic twin CSP at 6 weeks of gestation was detected in the anterior wall of the uterus at the site of the cesarean scar (Figure 1 and 2). Cardiac activities were present in both embryos with crown-rump lengths of 4 mm. The patient stated that her previous pregnancy was also a CSP that was treated with suction curettage (S&C) and balloon tamponade. Color Doppler ultrasonography showed increased blood flow around the gestational sac (Figure 3). All these findings were consistent with CSP. Laboratory findings revealed a hemoglobin level of 13.9 mg/dL and a β -hCG level of 27964 U/L. She and her husband were informed in detail about the treatment options and possible risks. As the amount of ongoing vaginal bleeding gradually increased, it was decided that S&C and balloon tamponade would be more appropriate. After S&C was performed under general anesthesia with a face mask, an 18 French Foley catheter was inserted through the cervical canal. The balloon was placed and inflated with 50 cc of saline to tamponade the bleeding from the scar. After ensuring that no postoperative complications occurred, no significant changes in hemoglobin levels were noted, and the patient's vital signs were stable, the balloon was gradually deflated completely and removed at the 12th postoperative hour. No bleeding or hematoma formation was noted at follow-up, and the patient was discharged on postoperative day 2. **CONCLUSION:** Recurrent spontaneous twin CSP developing after a previous CSP is extremely rare. According to the available literature, there is no consensus on the management of CSPs. However, expectant method is not preferred by many clinicians. Other options include surgical (laparotomy/laparoscopy) and hysteroscopic excision, S&C, selective uterine artery embolization, systemic and/or local methotrexate therapy. Early diagnosis of CSP is also important in terms of fertility preservation, as it prevents possible uterine rupture, severe intra-abdominal hemorrhage, and possible hysterectomy. Excisional approaches with laparoscopy or laparotomy seem to be too aggressive in some cases and should be preferred in advanced cesarean scar pregnancies. Considering the systemic side effects and the need for repeated interventions with methotrexate treatment, the relatively high risk of severe bleeding and uterine rupture with expectant management and the hysteroscopic approach, we believe that S&C and balloon tamponade are effective treatment modalities, particularly for cases diagnosed in early pregnancy.

Keywords: Cesarean scar pregnancy, Ectopic pregnancy, Methotrexate, Suction curettage, Twin pregnancy

Figure 1



Transvaginal sonographic view of the uterus in mid-sagittal plane showing a gestational sac located in the cesarean scar.

Figure 2



Visualisation of the monochorionic-monoamniotic twin cesarean scar pregnancy with two yolk sacs.

Figure 3



Increased perigestational blood flow and visible embryonic cardiac activity on color Doppler ultrasonography.

EP-111 [Perinatoloji]

Neurofibromatosis and pregnancy: report of a case and review of the literature

Seval Yılmaz Ergani

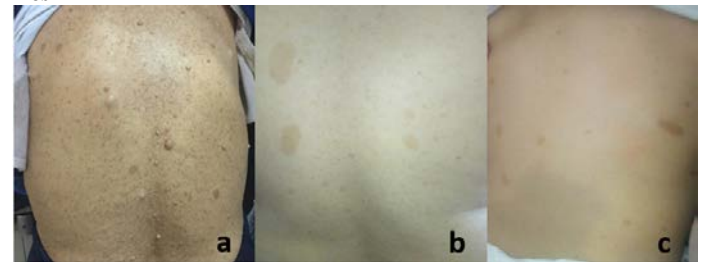
Etlik Zübeyde Hanım Kadın Hastalıkları ve Doğum E.A.H.,
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Background Neurofibromatosis (NF) is an autosomal dominant disease that causes characteristic lesions in the skin, eyes, and central and peripheral nervous systems. Here, we present a case of neurofibromatosis discovered during pregnancy. Case A 33-year-old female G3P1A1 patient without additional diseases was admitted to our hospital. Observation revealed extensive cafe-au-lait spots on the skin. A 25-week-old fetus was seen on the USG without any problems. When the usual cafe-au-lait spots were questioned, it was found that the patient had these spots from birth and that they were also present on his mother. The patient was referred to genetics. Because of the suspicion of neurofibromatosis, amniocentesis and an array were recommended, but the patient declined. Genetic analysis of the patient revealed a heterozygous mutation of the NF1 gene. The patient was referred to neurology and admitted to perinatal follow-up. The patient's pregnancy was spontaneously terminated vaginally at 39 weeks. A healthy 3460 g boy with Apgar 9/10 was born. Genetic analysis was requested for the newborn because cafe-au-lait spots were observed on his skin. The result of his genetic analysis was the same as that of the mother. The skin findings of the mother, the grandmother and the baby are shown in Picture 1. After these findings, the genetic examination of the patient's first child was normal.

Discussion and Conclusion: NF1 is a disease first described by von Recklinghausen and results from autosomal dominant inheritance or spontaneous mutation¹. In a multicenter study conducted in Canada, France, Italy and Spain, the mutations were found to occur mainly in women². A family history is present in 71.2% of cases³. The disease can be classified into two main groups based on clinical features and chromosomal abnormalities identified by molecular biology studies: NF type 1 (NF1) and NF type 2 (NF2). NF1 results from a defect in the NF1 gene on chromosome 17; NF2 results from a defect in the NF2 gene on chromosome 22. the long arm of chromosome 22. With an incidence of NF1 of 1/50,000, NF2 is much less common than NF1⁴. Diagnostic criteria have been established before 5. In NF1, cafe au lait macules, ephelides, and neurofibroma are characteristic of the skin. Cafe au lait macules are sharply circumscribed, light brown, macular lesions ranging from 0.5 to 50 cm in diameter⁶. The literature reports that neurofibromas can affect many systems in adulthood, such as pseudoarthrosis, macrocephaly, and nerve tumors^{3,7}. The number of neurofibromas, which increases during pregnancy, may predict how much NF1 will be passed on in the next generation. In addition, the high risk of preeclampsia explains the high risk of stillbirth. In this regard, women with NF1 have a higher risk of adverse pregnancy outcomes⁸. There is a weak genotype-phenotype correlation in NF1, so the course of the disease cannot be predicted and counseling during pregnancy is difficult⁹. Sometimes, the diagnosis can be easily missed if care is not taken in pregnant women, as it can manifest only by skin findings.

Keywords: cafe-au-lait spots, neurofibromatosis, pregnancy, prenatal.

Resim 1



Picture 1a. Skin signs of the grandmother, 1b. Skin signs of the mother, 1c. Skin signs of the newborn

EP-112 [Perinatoloji]

Delivery and postpartum management in multiple endocrine neoplasia 2A (MEN 2A): Case report

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Multiple endocrine neoplasia 2A (MEN 2A) is an inherited dominant syndrome characterised by medullary thyroid carcinoma, adrenal pheochromocytoma and hyperparathyroidism due to specific RET proto-oncogene mutations. Pheochromocytoma is a neuro-endocrine tumor which secretes catecholamine. It is rare in pregnancy. In this study, we aimed to discuss pregnancy, delivery and postpartum management whose had bilateral adrenalectomy due to pheochromocytoma and total thyroidectomy due to thyroid cancer. 35 years old, gravida 3 parity 2, singleton pregnant woman applied to our outpatient clinic for follow-up at 39 weeks of gestation. She had her previous birth by cesarean section. No pathology was observed in obstetric screening tests. The patient, who was followed up in the Endocrinology Clinic due to diagnosed MEN 2 syndrome, underwent total thyroidectomy in 2004 for medullary thyroid cancer and bilateral adrenalectomy in 2020 for pheochromocytoma. She has been using levothyroxine since 2004, hydrocortisone and fludrocortisone since 2020. The patient continued to take this treatment throughout her pregnancy. She was interned in our obstetrics service to keep under supervision for delivery management. On endocrinology consultation, patient's 24-hours catecholamine level and blood pressure checked. She was planned to be delivered by cesarean section under the steroid protocol. She delivered 3420 g healthy newborn at 40 weeks of gestation and steroid protocol was applied for 7 days postoperatively. Her postpartum follow up without any remarkable problems. Pheochromocytoma during pregnancy is a rare but important because morbidity and mortality rates are high for mother and fetus. Fortunately there was no maternal or fetal mortality and morbidity in this case.

Keywords: Delivery, multiple endocrine neoplasia 2A (MEN 2A), pheochromocytoma, pregnancy

EP-113 [Perinatoloji]

COVID -19 and pregnancy: a case report of Siamese twins

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INTRODUCTION: The aim of this study is to show very rarely, as Siamese twins, abnormalities of fetuses in patients who had Chovid's-19 disease in early pregnancy. Conjoined twins are the results of aberrant embryogenesis. The two main theories proposed to explain the phenomena are fission and fusion. The incidence rate is 1

in 50,000 births; however, since about 60% of the cases are stillborn, the true incidence is approximated at 1 in 200,000. There is a higher predisposition towards females than the male gender with a ratio of 3:1. Conjoined twins are classified based on the site of attachment.

METHOD: A 25-years-old pregnant woman came to our hospital on a routine ultrasound examination. By taking the anamnesis, we concluded that this was a healthy woman who had Chovid's-19 disease in the first month of pregnancy and was treated with Paracetamol drugs because of fever. She had mild symptoms of Chovid's-19 disease. After seven days of primary symptoms PCR test for SAR COV 2 virus was negative.

RESULTS: Ultrasound showed intrauterine pregnancy with a monochorionic and monoamniotic twins pregnancy. Two embryos can be seen connected in the area of the thorax. We saw the two hearts with normal frequency. The length of the back of the tail (CRL) was appropriate for amenorrhea of 9 weeks, and it was 26 mm in the first gem and 24 mm in the second. After talking and presenting all possible options, the patient decided to terminate the pregnancy and legal abortion was performed.

CONCLUSIONS: This rare anomaly like Siamese twins poses several technical, legal, and ethical issues for doctors and pregnant women. In this case, pregnant women had Chovid's-19 disease in early pregnancy, when organogenesis was not finished so the other dilemmas is Chovid's-19 disease really reason for such rare abnormalities or it was a coincidence.

Keywords: SIAMESE TWINS, CHOVID'S-19, PREGNANCY

ultrasound picture



thoracopagus of conjoined twins

ultrasound picture



two hearts

EP-114 [Perinatoloji]

Pregnancy and delivery management in Nephrotic syndrome: Case report

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In pregnancy, urinary protein excretion normally increases substantially; hence, urinary protein excretion is considered abnormal in pregnant people when it exceeds 300 mg daily. In many pregnant people, proteinuria appears to increase further at the time of labor and delivery. Proteinuria is one of the cardinal features of preeclampsia, a common and potentially severe complication of pregnancy. Proteinuria in pregnancy can also indicate primary kidney disease or kidney disease secondary to systemic disorders, such as diabetes mellitus or primary hypertension. It is important for clinicians caring for pregnant people to understand how to identify proteinuria, and how to determine whether preeclampsia or kidney disease (or both) is the cause. Pregnant patients with nephrotic syndrome are more prone to develop pre-eclampsia, preterm birth, low birth weight babies and intrauterine fetal growth restriction. The management of nephrotic syndrome in pregnancy is based on expert opinion, as minimal data are available to support evidence-based practice. A 28 years old, gravida 1 parity 0 pregnant woman visited the perinatology outpatient clinic at 29 weeks of gestation for routine control. During the current pregnancy no pathology was observed in obstetric screening tests. Patient's medical anamnesis include proteinuria and nephrotic syndrome. Her internal medicine follow-ups have been continued for 10 years. Ultrasound scan was performed by an experienced perinatologist, who reported a single intrauterine fetus with biometric measurements in accordance with 25 weeks of gestation. Intrauterine growth restriction was reported by perinatologist and patient opted to be hospitalized with a diagnosis of IUGR (intrauterine growth restriction), proteinuria and nephrotic syndrome. Her medical condition was observed by perinatologist, endocrinologist and nephrologist. Heavy proteinuria was detected with 24 hours urine test. After she had persistent high blood pressure and complaints of prodromal symptoms for preeclampsia such as headache, nausea; cesarean section was planned by perinatologist, endocrinologist and nephrologist with consensus. Magnesium sulfate infusion was continued while cesarean section was performing. She delivered 922 g healthy newborn at 31 weeks of gestation. Ascites was observed in abdominal cavity. Her postpartum follow up was without any remarkable problems.

Nephrotic syndrome patients need to be managed by efficient multidisciplinary approach to optimize fetomaternal outcome. Pre-conceptional counselling is necessary and continuation of pregnancy is planned only when renal functions are well preserved and blood pressure is under control. Here we are presenting a case report on pregnancy with nephrotic syndrome which was managed by multidisciplinary approach with successful outcome.

Keywords: Delivery, kidney disease, nephrotic syndrome, pregnancy, proteinuria

EP-115 [Perinatoloji]

Limb-Body Wall Complex: Case Report

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Limb-Body Wall Complex (LBWC) is a rare condition characterized by body wall defects, limb anomalies, and vertebral disorders. Extensive abdominal wall defects such as omphalocele, non-gastric, bladder exstrophy in the fetus; craniofacial anomalies such as encephalocele, exencephaly; scoliosis or dysraphic disorders in the vertebrae and extremity anomalies such as constriction ring, syndactyly or finger and limb amputations can be seen. This disorder is evaluated in the spectrum of diseases associated with premature rupture of the amniotic membrane, and there are those who consider LBWC to be a severe form of amniotic band syndrome. The umbilical cord may be absent or severely shortened. LBWC is a rare sporadic disorder, occurring in approximately 1 in 1:3000-1:14.273 births. Possible causes of the anomaly include premature amniotic rupture resulting in amniotic bands that exert direct mechanical pressure on the developing embryo/fetus, disruption of the embryo, or incomplete body folding due to an abnormality in the germinal disc. The diagnosis of the disease is made by prenatal USG. With the increase in first trimester aneuploidy screening, early diagnosis of the disease has increased. Amniotic band syndrome, isolated omphalocele, isolated gastroschisis can be considered in the differential diagnosis of LBWC. The size and location of the anterior abdominal wall defect is important. Midline defect is usually seen in omphalocele or cantrell pentology, paraumbilical defect on the right side in gastroschisis, and large lateral abdominal wall defects in LBWC. The accompanying extremity and vertebral anomalies help in the differential diagnosis. We aimed to present a case of LBWC diagnosed in our clinic due to its rarity.

Case: A 24-year-old patient with G7 P1 A5 was admitted to our clinic at the age of 14 weeks and 1 day according to the last menstrual period due to high NT detected in an external center. The patient's history was unremarkable except for recurrent abortion. In the ultrasonography performed, the crl was 70 mm, compatible with 13 weeks and 5 days; fka+; NT was observed as 3.3 mm. One of the lower extremities could not be observed totally. Vertebral continuity could not be observed in the sacral region. Vertebra was observed irregularly. The bladder was monitored. It was observed that the fetus was very close to the placenta and had a lateral abdominal wall defect. The patient was diagnosed with LBWC and offered the option of termination. The pregnancy was terminated by parent's decision.

Conclusion: LBWC is a rare, incurable and lethal anomaly. It can be diagnosed by ultrasound in the first trimester. Since it is an incurable

and lethal anomaly, termination option should be offered to the family.

Keywords: amniotic band, bladder exstrophy, encephalocele, gastroschisis, omphalocele, vertebral anomalies

anterior abdominal wall defect



extremity anomalies



sacral agenesis



termination material



EP-116 [Perinatoloji]

Pregnancy and postpartum management gastroschisis: case report

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Gastroschisis is a full-thickness paraumbilical abdominal wall defect usually associated with evisceration of bowel and sometimes other abdominal organs. Gastroschisis and omphalocele are the most common fetal abdominal wall defects. The prevalence of each is approximately 3 to 4 per 10,000 live births/fetal deaths/stillbirths/pregnancy terminations. The characteristic clinical finding in newborns is a full-thickness paraumbilical abdominal wall defect, often associated with evisceration of bowel. It is usually located to the right of the umbilical cord insertion site and tends to be <4 cm in diameter. There is no covering membrane. A 20 years old G2P1 pregnant patient at 35 weeks of gestation visited the Obstetrics&Gyneacology emergency room because of inguinal pain. She examined by an experienced perinatologist, who reported a single intrauterine fetus with biometric measurements in accordance with 33 weeks of gestation. Also the spot which was observed as suspicious for abruptio placentae. Fetal tachycardia was observed during non-stress test (NST). Following the fetal bradichardia was observed during non-stress test, perinatologist performed cesarean section. She delivered a baby with gastroschisis. Pediatric surgery team performed primary vacuum assisted closure in operating room. Postpartum follow up was without maternal/fetal remarkable problems. Gastroschisis is a full-thickness paraumbilical abdominal wall defect, usually on the right and associated with evisceration of fetal bowel. The pathogenesis of gastroschisis is unknown. All theories involve defective formation or disruption of the body wall in the embryonic period, with subsequent herniation of bowel. Pregnancy complications include increased risk of intrauterine growth restriction, fetal demise, spontaneous preterm birth, and bowel thickening and dilation. Gastroschisis in infants can be categorized as “simple” or “complex” based on the absence or presence of intestinal atresia, stenosis, perforation, necrosis, malrotation, or volvulus, but this distinction is often not possible to discern prenatally. Up to 25 percent of cases are complex, and these infants have significantly more gastrointestinal,

respiratory, and infectious disease complications in the neonatal period. Prenatal ultrasound could potentially identify majority of abdominal wall defects and accurately distinguish omphalocele from gastroschisis. This identification would permit an opportunity to counsel the family and to prepare for optimal postnatal care.

Keywords: Delivery, gastroschisis, postpartum, management

Gastroschisis



Gastroschisis 2



EP-117 [Perinatoloji]

Trisomy X Syndrome with normal phenotype in a patient with increased Trisomy 21 risk in combined screening test: A case report

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INTRODUCTION:: Trisomy X (also known as Triple X Syndrome) is the presence of an extra X chromosome, resulting in 47,XXX karyotype instead of 46,XX in a female fetus. It's the most common female chromosomal abnormality. Despite the incidence is thought to be 1/1000 in females, most of the cases aren't diagnosed. Clinical features may be various such as developmental delays (speech and/or motor), learning disability, primary ovarian insufficiency, seizures and psychiatric symptoms.

Trisomy X can be diagnosed prenatally by amniocentesis, chorion villus sampling (CVS) or non-invasive prenatal testing (NIPT). Fetal survival rate is good, with 99% surviving to term following diagnosis after amniocentesis.

CASE:: A 38-year-old gravida 3 para 2 patient was scheduled for prenatal screening on her 13th week of gestation. Her medical history in the previous pregnancies were unremarkable. She had delivered by cesarian-section (C/S) in both of her pregnancies without any complications. The patient had no history of smoking, alcohol, or substance use. Approximately two years before the pregnancy, renal artery stenting was performed due to the thrombosis of the artery. She developed chronic hypertension afterwards and had been taking acetylsalicylic acid 100 mg po daily. Combined prenatal screening test showed increased risk for Down Syndrome (1/182) and biochemical risk was 1/52, therefore the patient was referred to perinatology and medical genetics specialists for genetic consulting. Amniocentesis procedure and level 2 ultrasound was scheduled. Level 2 ultrasound was reported to be negative for fetal anomalies. Amniocentesis was performed and cytogenetic chromosome banding was applied to the amniocentesis material. 350 G and quantitative fluorescent polymerase chain reaction (QF-PCR) fragment analyses were consistent with Trisomy X. The patient was followed up as routine. On the 37th week of gestation, the patient gave birth via C/S to 3080 gr live newborn due to persistent hypertension. The newborn was investigated by pediatrics after birth and no pathologic finding of internal organ or genitals was detected (Picture 1). Repeat genetic counseling was provided to the family after birth.

DISCUSSION:: When prenatally diagnosed, couples should be provided with genetic counseling. The risk of miscarriage is not expected to be increased, the facial and physical features are usually normal and prenatal diagnose of Trisomy X is associated with higher intelligence quality (IQ). The clinical and physical manifestations such as developmental delays, learning disabilities and psychological disorders may be various, and yet it can not be determined which features will be present in the child.

In a prenatal diagnosis, postnatal confirmatory genetic testing is recommended, including Fluorescence In Situ Hybridization (FISH) testing for mosaicism. Postnatal renal ultrasound, cardiac evaluation and electroencephalogram (EEG) studies should be performed to evaluate medical manifestations.

It's important to note that also the prognosis of Trisomy X is variable, depending on the clinical findings and the involvement of the cognitive and psychological features.

Keywords: Combined screening test, Triple X Syndrome, Trisomy X

Figure 1



Photos of the infant prenatally diagnosed with Trisomy X a) Appropriate for gestational age b) Normal external genitalia c & d) Normal facial features

EP-118 [Perinatoloji]

Fetal Intracranial Hemorrhage

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24 years old 36+3w pregnant; her first pregnancy. The results of the dual screening test were low-risk, and no pathology was observed in the detailed USG. Your resume does not have any features. She had covid 2 times in the 4th and 7th months of her pregnancy. Periventricular hyperechoic areas were observed in the ultrasonography. Fetal MRI and torch panel were requested from the patient with the preliminary diagnosis of intracranial hemorrhage, bpd -fl incompatibility. On fetal MRI: Parenchymal signal increased in the right cerebral hemisphere and heterogeneous hemorrhage-edema, bilateral lateral ventricular appearance were reported as hemorrhagic content with diffusion-limiting content. After a 7 cm opening, the patient underwent an emergency cesarean section. What makes this case different is that it is intrasebral hemorrhage without any known risk factor for intrasebral hemorrhage. Another difference is that she had covid twice during her pregnancy.

Keywords: intracerebral hemorrhage, perinatology, encephalopathy

EP-119 [Perinatoloji]

A rare anomaly; limb body wall complex

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Limb body Wall complex also referred as body stalk, is a rare sporadic condition seen with multiple malformations, a wide spectrum of body wall anomalies.

Malformations involve combination of craniofacial, thoracoabdominal wall, spinal and extremal structures. Findings have also shown short or absent umbilical cord and/or exteriorization of fetal heart and bladder additively.

These criterias have shown two out of three of the following;
-Exencephaly or encephalocele with facial defects, -thoraco and/or abdominochisis, -limb defects.

The incidence rates varies between 0.2 to 1.3 per 10.000 pregnancies and a ratio of 0.32 per 100.000 births. Birth ratios are decreased drastically due to malformations which show no compatibility with life.

In our case; a 27 years old primigravida nulliparous woman was referred to our clinic for first trimester screening test at 12w 6d since last menstrual date. She was 69 kg and blood pressure was 110-70 with no comorbidities. There was no history of drug or alcohol use, familial history, relativity with her husband. She was only using folic acid to supply her pregnancy. In the ultrasonographic examination there was an intrauterin singleton pregnancy which fetal heart rhythm was seen with kyphoscoliosis in addition to vertebral deformities, gastrochisis and exencephaly was seen in a CRL: 10+6 39mm fetus. Placenta was seen intact but amniotic fluid was increased than normal levels.

Termination was suggested to parents due to early prenatal diagnosis and unexpected fetal compliance.

Parents were also referred to medical genetics clinic and their opinion was also supporting our suggestion.

After consuelling with the patient and the relatives termination was decided with misoprostol regimen.

A total fetal and placental material was aborted which a gender discrimination could not be made and sent to genetical and pathological examination.

Genetic studies still continue for microarray and chromosomal analysis but as seen in other cases that are presented in the literature, results are expected to be normal.

Material was also sent to pathological examination for necropsy for a gold standard diagnosis; which has been also shown in previous studies as normal but we are stil awaiting for the definitive result.

To sum up; limb body wall complex (also called body stalk anomaly, congenital absence of umbilical cord, cylosomus and pleurosomus) is a rare condition first described by Van Allen et al in 1987. Its diagnostic criteria is stil reforming and different types are described. The exact etiology is stil unkown but both amniotic band theory and vascular theory are inadequate on their own. Most accepted theory explains early embryonal dysplasia, where abnormal embryonic folding give rise to malfunctioning of the body wall ectodermal placode, leading to defective abdominal wall closure and umbilical anomalies.

The aim of this study is to remind our colleagues the importance and hallmarks of intrauterin sonographic diagnosis which can be done at early stages of pregnancy and so impetuous guidance to therapautic termination options.

Also we aim to show the importance of clinical suspicion when scoliosis/ neural tube defects/ thoraco-abdominoschisis or abnormal fetal membranes are seen.

Keywords: limb body wall complex, anomaly, thoraco-abdominochisis

EP-120 [Perinatoloji]

Prenatal Diagnosis and Follow Up for a Rare Case: Anterior Cervical Midline Submandibular Lymphangioma

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Introduction: Lymphangiomas are rare benign hamartomatous tumours of the lymphatic system with a prevalence of 1 in 6,000 births. Prenatal diagnosis of fetal lymphangioma is through the detailed ultrasonographic evaluation of a uniloculated or multiloculated cystic irregular mass, mostly appearing on one side of the neck (75%) or axillary area, with occurrences on the chest wall, abdominal wall or extremities, and very rare appearances in the mesentery or retroperitoneum. Although following diagnosis, the incidence of chromosomal abnormalities and genetic syndromes is not increased, there is risk for central venous compression that can lead to hydrops and esophageal compression leading to polyhydramnios. Patient follow up with ultrasound scans every 2-3 weeks is recommended to monitor size of tumour and amniotic fluid volume. For purposes of differential diagnoses, the absence of blood flow on Doppler imaging is supportive of lymphangiomas. Aside from the benefits of ultrasonography, fetal magnetic resonance imaging is also valuable in assessing the extent of the mass. The modality of delivery, treatment method and postnatal prognosis depend on the location and size of the mass. Isolated lymphangiomas have better outcomes since treatment with sclerotherapy or surgical resection of the tumour is effective in most cases.

Case: Usually detected unilaterally, this presentation aims to present a rare case of submandibular lymphangioma located on the anterior cervical midline that was diagnosed antenatally, with response to sclerotherapy with bleomycin treatment in the postnatal period. A prenatal diagnoses of lymphangioma was initially made at 25weeks of gestation with a multiloculated cystic submandibular mass extending to the anterior cervical midline measuring 34x16 mm on the transverse plane and a multiloculated submandibular mass of 11x11 mm on the sagittal plane with no blood flow viewed on the imaging. Fetal MRI supported the ultrasonography. No additional anomalies were detected. There is no Rh incompatibility. Prior discussion and counselling was provided for the family. A male baby was delivered with a caesarean section from a primi gravida 29-year-old mother at 38+2 weeks of gestation, weighing 3465 grams and 50cm with an 9-10 APGAR score. Upon inspection, there was a 6x4 cm lymphangioma on the anterior cervical midline. Postnatal ultrasonography and MRI confirmed a mass measuring 60x54x40 mm on the superior anterior cervical midline, neighbouring the trachea with no evident compression, extending laterally that did not show any vascularization. Following a consultation with the department of pediatric surgery, intralesional sclerotherapy with bleomycin injection was administered to the 14-day-old neonate. There was no serious complication or side effect to the treatment. Due to the evident response to sclerotherapy with significant reduction of the lymphatic mass, at six months of age a secondary bleomycin treatment was administered to the patient.

Conclusion: Lymphangiomas are rare benign tumours of the lymphatic system that usually appear laterally on fetal cervical imaging. This case uniquely presented with a single multiloculated cystic mass located on the superior anterior cervical midline that extended laterally and showed significant response to sclerotherapy. There were no additional morbidities associated with this case. There is no increased risk for recurrence.

Keywords: cervical, lymphangioma, midline, perinatology, postnatal, prenatal

sumeyye demirci 26w gestation lymphangioma

submandibular lymphangioma measuring 11x11mm on the sagittal plane at 26w of gestation

sumeyye demirci 29 w gestation lymphangioma

submandibular anterior cervical midline lymphangioma seen at 29w of gestation

sumeyye demirci 38w of gestation lymphangioma

multiloculated submandibular mass measuring 67x31mm extending to the pharynx with no blood flow viewed on the imaging

sumeyye demirci postnatal submandibular lymphangioma

postnatal submandibular anterior cervical midline lymphangioma

EP-121 [Perinatoloji]

Prenatal diagnosis and follow up of congenital splenic cyst: a case report

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Prenatally detected abdominal cystic masses poses significant challenges in diagnosis and treatment. Congenital splenic cysts are very rare abdominal cystic masses.

The 27-year-old patient, gravida3 parity2, without any comorbidity, alcohol or smoking history, was admitted to our outpatient clinic at 34 weeks of gestation. First and second trimester screening tests and 75 g glucose tolerance test were normal. In the sonographic evaluation, a 17x16mm cystic mass was observed in the left upper quadrant. Stomach and left kidney were normal. In the color Doppler evaluation, no blood flow was observed in the cyst, and there was no pathological blood flow in the remaining splenic tissue. No pathology was observed in other organ systems and no change in the size of the cyst was observed. The baby was delivered in the 39th week of pregnancy (4225 g, male). Apgar scores were 9 (1st minute) and 10 (5th minute). Early postnatal abdominal sonography confirmed the diagnosis. In our one-year followup, it was observed that the cyst persisted. Periodic sonographic follow-ups will continue until the cyst is completely resolved. Prenatal sonographic diagnosis of congenital splenic cyst was first reported in 1988 by Lichman and Miller. In the literature, there are limited cases, its incidence is limited to case series of local clinics. In 1995, Garel and Hassan reported spontaneous regression for the first time. In subsequent publications, it is known that congenital splenic cysts generally progress asymptotically and regress during follow-up.

The management of these cases is carried out in the form of followup at intervals determined by the clinics. However, there is no consensus. Management algorithms to be determined in line with these cases will contribute to clinical practice.

Keywords: congenital splenic cyst, congenital cystic masses, abdominal cystic masses, prenatal sonography

Figure 1



Fetal splenic cyst of 17x18mm detected at 34th gestational week. The cyst is seen behind the fetal stomach.

Figure 2



Stomach and left kidney in natural appearance

EP-122 [Perinatoloji]

Prenatal diagnosis of cervical teratoma: a case report

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Fetal tumors are extremely rare. Formed by pluripotent cells of all three germ cell layers (entoderm, ectoderm and mesoderm) teratomas are the most common type of fetal tumor with an incidence of 0.07 - 2.8 in 1000 pregnancies(1,2,3) We present a case with cervical teratoma prenatally diagnosed in our clinic.

CASE:: A 25-year-old patient, Gravida 2 parity 1, was referred to our clinic with a preliminary diagnosis of cystic hygroma due to a mass originating from the fetal neck at 20 weeks of pregnancy. In our ultrasound examination, we observed a mass containing solid and cystic areas with areas of calcification, originating from the left anterior side of the fetal neck and scalp edema. We could not see the fetal stomach. A differential diagnosis of fetal neck mass includes lymphangiomas, hemangiomas, teratomas, goiter and neuroblastoma. With our ultrasound findings, this mass was considered fetal teratoma. The family was informed about ex utero intrapartum treatment (EXIT) that should be performed at birth due to blockage of the airway. Detailed information was given about the prognosis. The family ultimately chose a medical termination of the pregnancy. Pathological examination after termination revealed immature teratoma.

Keywords: Ex-Utero Intrapartum treatment (EXIT), Neck mass, Teratoma, Prenatal diagnosis

fetal teratom



teratoma



teratoma



teratoma4



teratoma5



EP-123 [Perinatoloji]

Thrombotic microangiopathies in pregnancy

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GOAL: Thrombotic Thrombocytopenic Purpura (TTP) and Hemolytic Uremic Syndrome (HUS) are acute syndromes that affect multiple organ systems with microangiopathic hemolytic anemia and thrombocytopenia. Pregnancy is a high-risk time for the development of thrombotic microangiopathy (TMA). We aimed to review the current diagnosis and treatment of this important syndrome through our two cases.

METHODS: We reviewed the records of 2 cases diagnosed with thrombotic microangiopathy between 26.08.2021 and 15.04.2022.

FINDINGS:

Case 1: 21 years old, G2P1, 23 weeks and 2 days pregnancy. She applied to the emergency service due to bloody diarrhea lasting 4-5 days after eating chicken. She was hospitalized and azithromycin treatment started. From the hospitalization, the laboratory values started to decrease as Platelets from 248000 to 21000, haemoglobin from 10.3 to 6.7. Creatinine rose from 0.44 to 2.46 and LDH rose from 187 to 1527. In stool examination, clostridium toxin a,b and Entamoeba histolice antigen were positive. After the patient's platelet count decreased, the patient was consulted at our perinatology clinic with a preliminary diagnosis of HELLP syndrome. A peripheral blood smear was performed. Schistocytes were seen in all areas in the peripheral smear. When thrombocytopenia, newly developing anemia and renal failure were evaluated together with high LDH, it was evaluated as hemolytic uremic syndrome (HUS). ADAMTS13 antibody and antigen determinations were requested. Plasmapheresis was started. Plasmapheresis was applied to the patient 8 times. Transfusion of 2 units of erythrocyte suspension was performed. With plasmapheresis, it was observed that the LDH and creatinine values of the patient decreased, and the destruction of platelets and haemoglobin stopped. ADAMTS13 value was normal.

Case 2: 28 years old patient, Gravida3, parity 2 presented to the emergency department with a complaint of headache at 26 weeks of gestation. Her blood pressure was 170/110. Magnesium sulfate was started. With nifedipine, blood pressure decreased to 150/95.

Hemoglobin was 8.4, creatinine was 7.99, urea: 174. Magnesium sulfate treatment was stopped because there was no urine output. The urinary system ultrasound was normal. Dialysis was started. Schistocytes were seen in the peripheral blood smear. Plasmapheresis was started considering microangiopathy. Emergency cesarean section was performed when fetal distress developed in the service follow-up. Although dialysis and plasmapheresis were performed 3 times, she was transferred to the nephrology service because of progressive creatinine increase and acute kidney injury. ADAMTS-13 was detected as 70. Eculizumab treatment was started and the destruction of haemoglobin and platelets stopped.

RESULTS: Detection of thrombocytopenia fragmented red blood cells in peripheral blood smear, and end-organ damage are enough to think about TMA. There is an acute risk of death in these cases. Plasmapheresis has been recommended as first-line therapy for HUS associated severe renal failure. In cases unresponsive to plasmapheresis, normalization of all hematological features and rapid kidney recovery has been observed with the use of the monoclonal antibody eculizumab. However, the main obstacle to the use of this monoclonal antibody as first-line therapy is its high cost.

Keywords: ADAMTS13 activity, Atypical hemolytic uremic syndrome, Microangiopathy

EP-124 [Perinatoloji]

A case of intrauterine arterial thrombosis occurred with fetal distress

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Objective: 10% of childhood thrombosis is seen in the neonatal period. It should be known that there may be a predisposition to thrombophilia associated with genetic factors in both arterial and venous neonatal thromboembolism cases, and these examinations should be planned in developing cases.

In our case, there was a family history of hereditary thrombophilia, and CMV+ was also present in the baby. We aimed to present a rare case of intrauterine onset congenital arterial thrombosis, which manifests itself with fetal distress findings, in contrast to newborn thrombosis, which is frequently catheter-related.

CASE: A 28-year-old, 36-week pregnant patient applied to me for routine polyclinic control. There was a history of habitual abortion in the patient's history. The patient had a complaint of decreased baby movements for the last 2 days. USG: FKA +, AFI 16 cm, umbilical doppler normal, EFW: 2900 g. TORCH panel and glucose values were requested due to polyhydramnios. Extracted NST: Non-reactive, no contraction. CMV ig M+ was detected in the mother's examinations. Then the patient had an emergency C/S. A single live baby weighing 2840 with 8-9 apgars was delivered. Bruising and peeling of the skin were observed on the left forearm, palm and fingers of the baby due to circulatory disorders. In the extremity examination, cyanotic discoloration secondary to circulatory disorder extending from the left elbow to the palm, and extending to the third, fourth and fifth fingers of the left hand, maceration in the ulnar region of the left forearm, and edema in the left hand were detected. Afterwards, Doppler USG and examinations were requested. In the examinations of the baby; Hemoglobin was 19.3 g/dl, platelet: 163000/mm3. Prothrombin time (PT) 15.7 sec, aPTT: 39 sec, INR

1.38, D-dimer: 2895. In addition, CMV ig M (+) was detected in the requested examinations. Upper extremity Doppler USG: No flow was observed in the braial artery and its distal part from the distal part of the axillary artery. Referral was initiated for the patient who was suspected of brachial artery thrombosis according to Doppler USg results. The baby, who was in the 3rd step hospital, was transferred at the postnatal 3rd hour.

CONCLUSION: Extremity ischemia is rare in the neonatal period. Centrally inserted arterial or venous catheters are the most important and most common among all known risk factors in newborns. Arterial thrombosis of the extremities; It is seen as weak or no extremity pulses, pallor, coldness, decrease in peripheral circulation and skin temperature. Angiography is the gold standard for diagnosis in adults and older children, but is rarely used routinely. Doppler USG, a non-invasive technique, is frequently used to confirm the diagnosis when clinically suspected. In conclusion, neonatal thrombosis can be spontaneous or it can often develop due to an underlying and known reason. It should be kept in mind that it may cause congenital arterial thrombosis in the presence of hereditary thrombophilia in the family and in cases of CMV infection. Intrauterine arterial thrombosis may present itself with fetal distress findings.

Keywords: thrombosis, cmv infection, fetal distress

Left arm view



Maceration of left forearm

Left arm view



Edema, cyanotic appearance of the left arm from the elbow

EP-125 [Ürojinekoloji - Rekonstrüktif cerrahi]

Successful management of uterin prolapse during pregnancy with Arabin ring pessaryOzan Karadeniz¹, Gizem Nur Koyan Karadeniz²¹Arnavutkoy State Hospital²Cam and Sakura City Hospital

Introduction and aims of this study: Uterine prolapse associated with pregnancy is an extremely rare condition. There are a variety of complications that have the necessity of close observation including preterm labor, maternal sepsis, fetal demise, urinary retention. The successful management of uterine prolapse during pregnancy can be effective and more beneficial with the appropriate patient training. We aimed to show successful reposition of a grade IV descensus uteri of a 30-year-old pregnant patient with ring pessary and prevention of preterm labor.

METHODS: A 30-year-old gravida 4, para 3 patient presented to our clinic at 23 weeks of gestation with stage IV cervical prolapse. (image 1) Her obstetric history was unremarkable. Her gynecological exam showed no sign of contraction of the uterus, cervical shortening, or rupture of the membranes. Her cervix was edematous and hyperemic. We placed a 10 mm ring pessary to prevent preterm labor or other complications caused by cervical insufficiency. (image 2) The patient trained for pessary usage also counseled about her situation and advised kegel exercises.

RESULTS: The patient was admitted to our emergency outpatient clinic at 37 weeks of gestation with four cm cervical opening concomitant uterine contractions. Apgar scores of 7%, 3400 gr female infant spontaneously delivered approximately in 3 hours. After one week from delivery, due to the persistence of the uterine prolapse (image 3), a 9 mm ring pessary was implemented. She called for a control examination after 6 months from her delivery which demonstrated stage 3 prolapse and stage 2 cystocele. Laparoscopic sacrohysteropexy was scheduled for the patient due to the persistence of the prolapse.

CONCLUSION: Pregnancy complicated with uterine prolapse should be managed by individualized treatment depending on the patient's preference. Those patients may benefit from the use of a vaginal pessary to protect the cervix from infection, local trauma and for keeping the cervix intact in the vagina preventing preterm labor.

Keywords: Dystocia, management, pessary, pregnancy, uterine prolapse

Figure 1



Patient's first vaginal examination.

Figure 2



Patient's vaginal examination after insertion of arabin ring pessary.

Figure 3



Patient's vaginal examination after delivery.

EP-126 [Ürojinekoloji - Rekonstrüktif cerrahi]

Static and dynamic MRI in presurgical assessment of stress urinary incontinence in females after vaginal trauma

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BACKGROUND: Urinary incontinence, defined as involuntary leakage of urine, is one of the most common conditions in the female population that causes significant anxiety and negatively affects the quality of life. Urinary incontinence also has a considerable impact on health care costs. Dynamic evaluation of the urethral sphincter is possible with MRI and simultaneous functional and morphologic assessment may assist in classification of incontinent patients into hypermobility and intrinsic sphincter deficiency categories. The additional information on the status of the urethral sphincter and supporting

ligaments provided by MR imaging may contribute to the diagnosis and staging of urinary incontinence in the female population. Treatment of patients with urinary incontinence depends on the type of sphincter abnormality. MR imaging contributes findings that characterize the urethral dysfunction and may guide the choice of therapy and posttreatment follow-up in the future.

The aim of the study was to evaluate the female urethra and its supporting structures in patients with stress urinary incontinence and to differentiate between urethral sphincter defect and urethral hypermobility as a cause of stress urinary incontinence.

RESULTS: In our study, 50% of the incontinent patients have given previous history of trauma during vaginal delivery vs 30% in control group ($P=0.451$).

Both the cases and control groups have shown no significant differences in terms of the BMI.

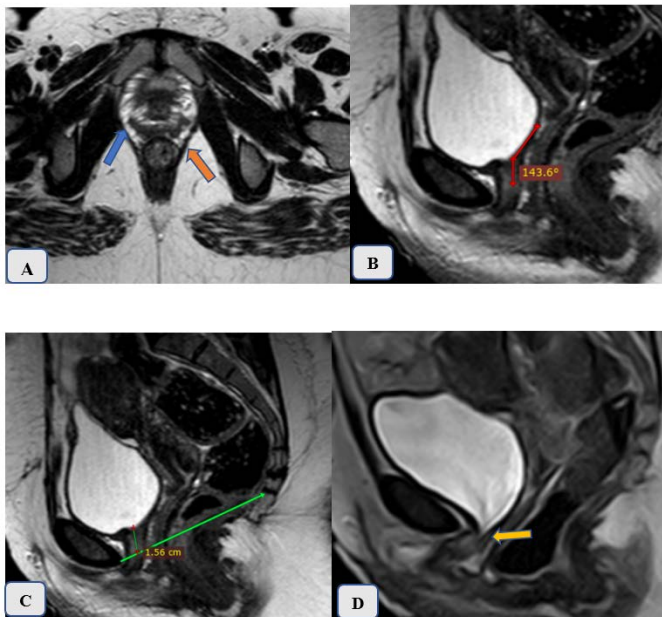
Funnelling of the bladder neck as well as functional suprapubic urethra sphincter length were significantly associated with UD's diagnosis of SUI, being more prevalent at the incontinent group with ISD component.

MRI has shown good prediction statistics with 83.33% sensitivity, 100% positive predictive value, 94.74% negative predictive value and 100% specificity for funnelling of the bladder neck and 83.33% sensitivity, 41.7% positive predictive value, 91.7% negative predictive value and 61.1% specificity respectively for suprapubic urethral length.

CONCLUSION: MRI plays an important role in the assessment of urethral hypermobility and sphincteric dysfunction as underlying causes of stress urinary incontinence in women when considering treatment options.

Keywords: Dynamic pelvic MRI, urodynamics study, urethral hypermobility, intrinsic sphincter defect, stress urinary incontinence.

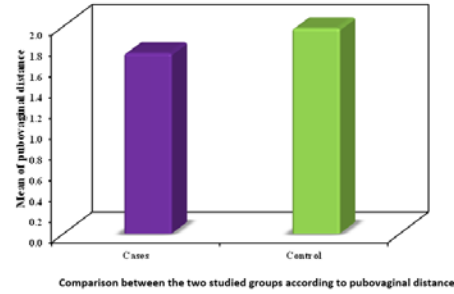
52-year-old, presented with SUI. UD's show VLPP=75cmH₂O, MUCP=50cmH₂O.



(A) Axial T2WI shows loss of H shape configuration of the vaginal with bilateral symmetrical thinning of the PRM. (B) Sagittal T2WI shows

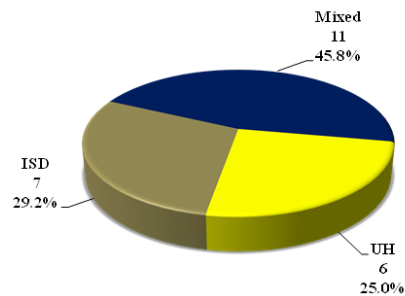
increased vesicourethral angle measuring about 143°. (C) Sagittal T2WI shows decreased length of the suprapubic urethra. (D) Dynamic MRI of the pelvis with maximum straining shows funnelling of the UB neck.

Comparison between cases and control groups regarding the pubovaginal distance



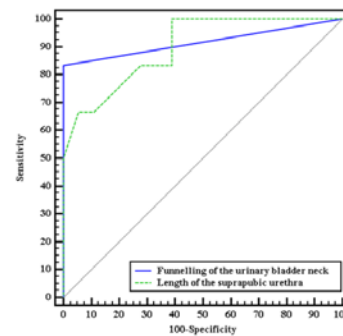
Distribution of the studies cases regarding the type of stress urinary incontinence

Type	No.	%
UH	6	25.0
ISD	7	29.2
Mixed	11	45.8



Distribution of the studied cases according to type of SUI

Sensitivity and specificity of funnelling of the UB neck and length of the suprapubic urethra in the diagnosis of urethral hypermobility



Validity (sensitivity, specificity) for Funnelling of the urinary bladder neck and Length of the suprapubic urethra in the diagnosis of UH type compared to the combined group of ISD and mixed

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