MANAGEMENT OF ADNEXAL MASSES

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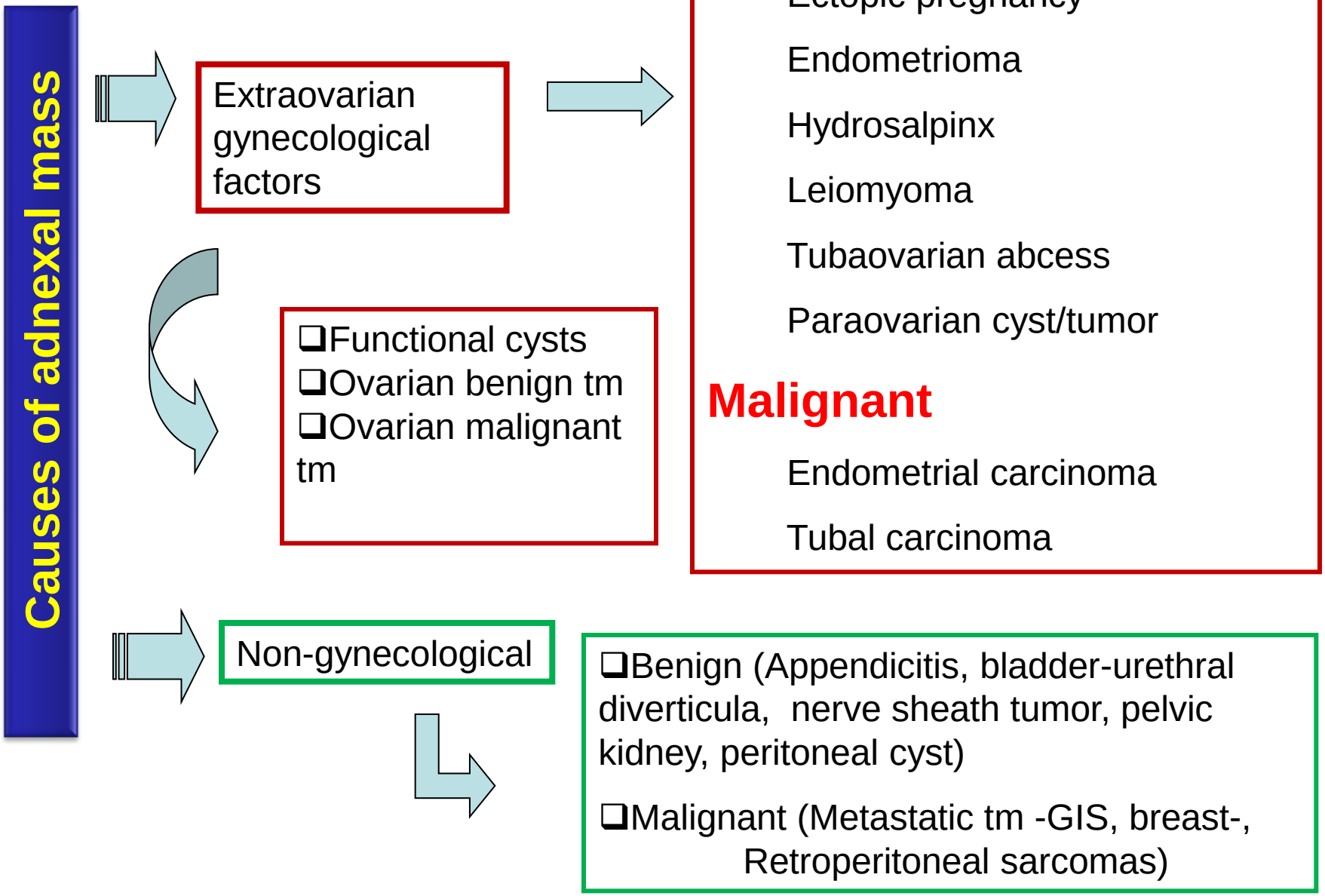
TAJEV, April 2014, ANTALYA

Definition

- ❑ Ovary, tuba, broad ligament
- ❑ Usually originates from the ovary

Symptomatology

- ❑ Symptomatic
  - **Acute abdomen**
  - **Pelvic pain**
  - **Dispareunia**
  - **Nonspecific complaints** (compression sign, hormonal signs due to functional mass, urinary system or gastrointestinal system signs)
- ❑ Asymptomatic


Causes of adnexal mass
Extraovarian gynecological factors
❑Benign
Ectopic pregnancy
Endometrioma
Hydrosalpinx
Leiomyoma
Tubaovarian abcess
Paraovarian cyst/tumor
Malignant
Endometrial carcinoma
Tubal carcinoma
❑Functional cysts
❑Ovarian benign tm
❑Ovarian malignant tm
Non-gynecological
❑Benign (Appendicitis, bladder-urethral diverticula, nerve sheath tumor, pelvic kidney, peritoneal cyst)
❑Malignant (Metastatic tm -GIS, breast-, Retroperitoneal sarcomas)

- In USA, approximately 5-10% of women undergo surgery for "suspicious ovarian mass"
  - **Ovarian cancer detected in 13-21%**

Holcomb K, 2011

- Of those diagnosed with adnexal masses
  - **In premenopausal period,** 4-24%, and
  - **In postmenopausal period,** 39-63% were malignant

Rossi A. 2011

Importance

MALIGNANT

- Surgery
- Gynecologic Oncologist
- Laparotomy
- Midline incision

BENIGN

- Follow-up
- Gynecologist
- Laparoscopy / Mini Laparotomy

Adnexal masses

Premenopausal period

- **The upper limit of normal for ovarian volume is 20 cm^3**
- **Most of them are benign (functional cysts are the most common)**
- **Cystic teratoma are the most common form of neoplastic adnexal masses**
- Other factors

  (Ectopic pregnancy, PID, hydrosalpinx, pelvic kidney, intraligamentous myoma)
- Ovarian tumors
  - <20 years old, the most common **Germ cell tumor**
  - >20 yeras old, the most common Epithelial tumor
- **Contribution of the tumor markers is limited**

Adnexal masses

Postmenopausal period

- **The upper limit of normal for ovarian volume is 10 cm^3**
- Incidence of asymptomatic ovarian cyst is 18%
  - 70% of them spontaneously regress
- Unilocular cysts and cysts <10 cm risk of malignancy is 0.1%
- **Tumor markers are more useful in this period**

Modessit SC, 2003

McDonalds JM, 2006

Suspicious Adnexal Mass: Diagnosis and Management

- The best diagnostic method?
- The best treatment method?

Diagnosis

- Anamnesis
- Physical and gynecological examination
- Laboratory

  Tm markers
- Imaging methods

Anamnesis

The group at risk of malignancy:

- ❑ **Postmenopausal period**
- ❑ **Nulliparity- Infertility**
- ❑ **History of breast cancer**
- ❑ **Family history (BRCA 1-2)**

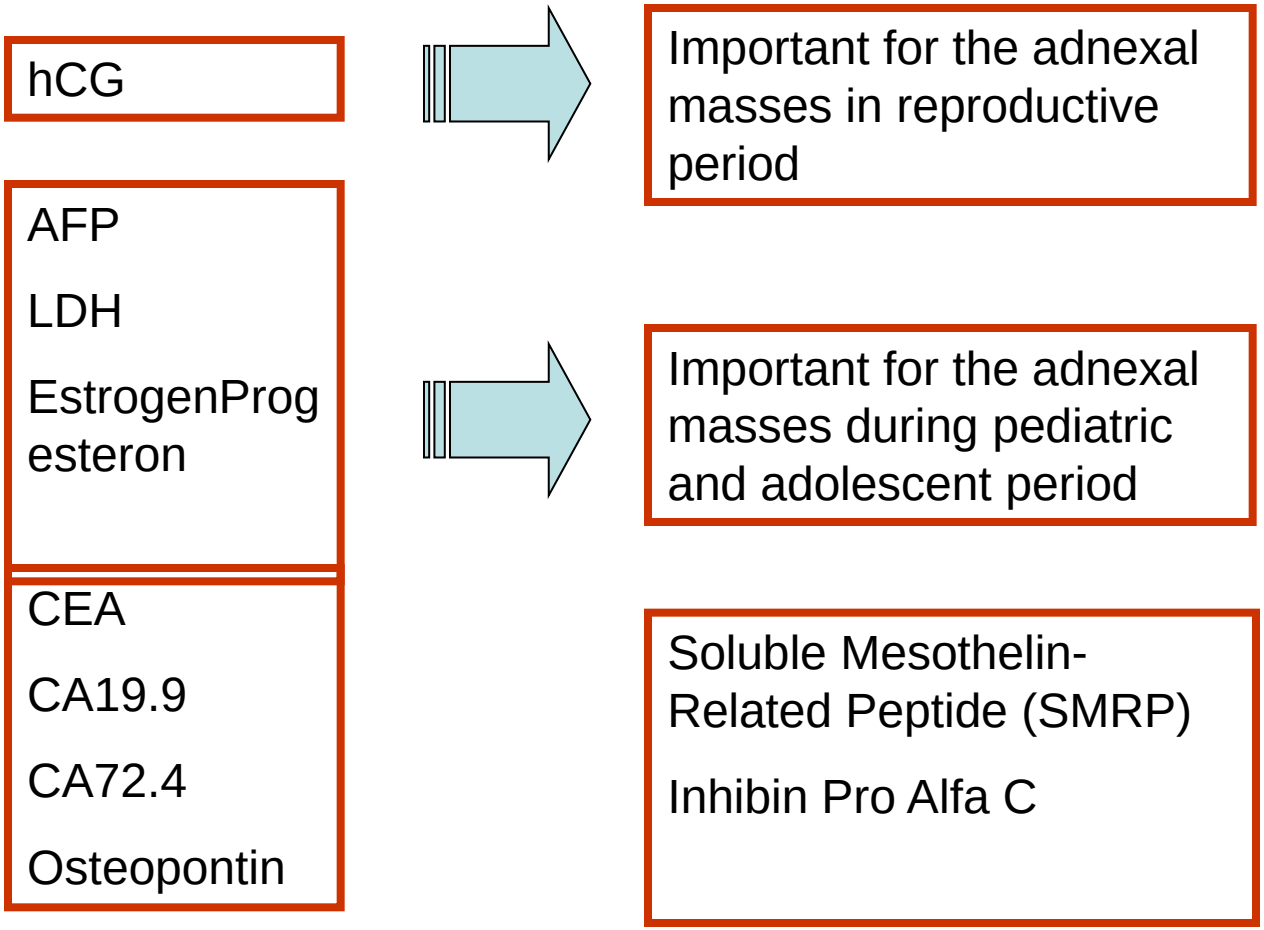
Examination findings

The lowest sensitivity 60%

Clinical finding	Benign	Malignant
Unilateral	***	*
Bilateral	*	***
Cystic	***	*
Solid	*	***
Mobile	***	**
Fixed	*	***
Irregular	*	***
Smooth	***	*
Ascites	*	***
Nodularity in Douglas	--	***
Rapid growth	--	***

Tumor markers

- ❑ CA125
- ❑ Human Epididymis Protein 4 (HE4)



Tumor markers Summary

- CA125 is still the most common marker used in the diagnosis of adnexal masses
- HE4 is more reliable in the differentiation of benign/malignant in premenopausal period
- There is no additional advantage of using CA125 and HE4 together
- CA125 and HE 4 cannot be used as a screening test in ovarian cancers due to their low sensitivity

Imaging Methods

- *Sonography*
- *Tomography*
- MRI
- PET-CT

SUMMARY
Imaging Methods

- **The primary imaging method in evaluation and follow-up of adnexal masses is ultrasonography**
- CT and MRI are not the primary imaging methods in adnexal masses
- MRI, could be used as the second choice if the US findings are not diagnostic or if the diagnosis is suspicious
- CT, could be used if it is thought that there is metastasis or before and after primary cytoreductive surgery

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journal homepage: www.elsevier.com/locate/ygyno

Review

Preoperative identification of a suspicious adnexal mass: A systematic review and meta-analysis ☆

Jason E. Dodge [a], Allan L. Covens [b], Christina Lacchetti [c,*], Laurie M. Elit [d], Tien Le [e], Michaela Devries-Aboud [f], Michael Fung-Kee-Fung [e,**] and The Gynecology Cancer Disease Site Group

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[b] Division of Gynecologic Oncology, Odette Cancer Centre, Sunnybrook Health Sciences Centre, Toronto, ON, Canada
[c] Cancer Care Ontario, Program in Evidence-Based Care, McMaster University, Hamilton, ON, Canada
[d] Department of Obstetrics and Gynecology, McMaster University, Hamilton, ON, Canada
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[f] Guelph Family Health Team, Guelph, ON, Canada

Preoperative identification of a suspicious adnexal mass: A systematic review and meta-analysis ☆

Ultrasonographical Morphology

Sassone Scoring system
Lerner Scoring system
DePriest Scoring system
Ferrazzi Scoring system
Finkler Scoring system

Doppler Sonography

2D Power Doppler
3D Power Doppler
Resistance Index
Pulsatility Index
Peak Systolic Velocity
Combined Morphology and Doppler
3D Ultrasonography and Doppler

Enlarged Scoring Systems

Risk of Malignancy Index (RMI) 1-2-3
Artificial Neural Network (ANN) 1-2
Logistic Regression Models (LRM) 1-2

Although it has been widely used in USA after FDA approval;
as there is no sufficient study comparing HE4 and other methods, evaluation of these tumor markers are not included to the metaanalysis

Other imaging methods

Dodge et al. Gynecol Oncol, 2012

Preoperative identification of a suspicious adnexal mass: A systematic review and meta-analysis ☆

Methods	Sensitivity (95% CI)	Specificity (95% CI)
2D ultrasonography	**85.3% (95% CI, 69.0–93.8%)**	**87.4% (95% CI, 75.0–94.1%)**
3D ultrasonography	**93.5% (95% CI, 74.1–98.6%)**	**91.5% (95% CI, 80.0–96.6%)**
Sassone Scoring System (cutoff 9)	88.6% (95% CI, 81.3–93.3%)	77.5% (95% CI, 70.0–83.6%)
Lerner Scoring System	90% (95% CI, 87–98%)	63% (95% CI, 40–81%)
DePriest Scoring System	91% (95% CI, 85–97%)	69% (95% CI, 60–78%)
Ferrazzi Scoring System	85.2% (95% CI, 76.4–91.1%)	85.9% (95% CI, 71.9–93.5%)
Finkler Scoring System	83.5% (95% CI, 73.1–90.4%)	78.2% (95% CI, 59.0–89.9%)
RMI (cutoff 200)	**79.2% (95% CI, 73.6–83.9%)**	**91.7% (95% CI, 87.2–94.6%)**
RMI 2 (cutoff 200)	79% (95% CI, 71–87%)	81% (95% CI, 72–90%)
Tailor's Model	60% (95% CI, 20–100%)	93% (95% CI, 82–100%)
RI	77.2% (95% CI, 68.7–83.9%)	89.8% (95% CI, 85.6–92.8%)
PI	80.6% (95% CI, 74.9–85.2%)	79.9% (95% CI, 69.8–87.2%)
PSV	80.0% (95% CI, 67.7–88.5%)	84.2% (95% CI, 69.3–92.7%)
Visualization	88% (80–92%)	78% (95% CI, 65–87%)
MRI	91.9% (95% CI, 88.8–94.1%)	88.4% (95% CI, 83.7–91.9%)
CT	87.2% (95% CI, 74.2–94.1%)	84.0% (95% CI, 66.6–93.3%)
PET	67% (95% CI, 52–79%)	79% (95% CI, 70–85%)
CA-125	**78.7% (95% CI, 75.3–81.7%)**	**77.9% (95)**

Dodge et al. Gynecol Oncol, 2012

Preoperative identification of a suspicious adnexal mass: A systematic review and meta-analysis☆

- ❑Sensitivity and specificity of 3D Ultrasonography is higher than 2D Ultrasonography

- **❑Sensitivity and specificity of morphological scoring systems is in accepted levels, however the superiority of each system to the other has not been demonstrated**

- ❑The superiority of doppler evaluation alone to simple ultrasonographical evaluation has not been demonstrated

- ❑Although statistical difference has not been demonstrated, MRI provides better results according to CT

- □ **CA 125 measurement is less reliable according to the other assessment methods**

Dodge et al. Gynecol Oncol, 2012

Suspicious Adnexal Masses: Diagnosis

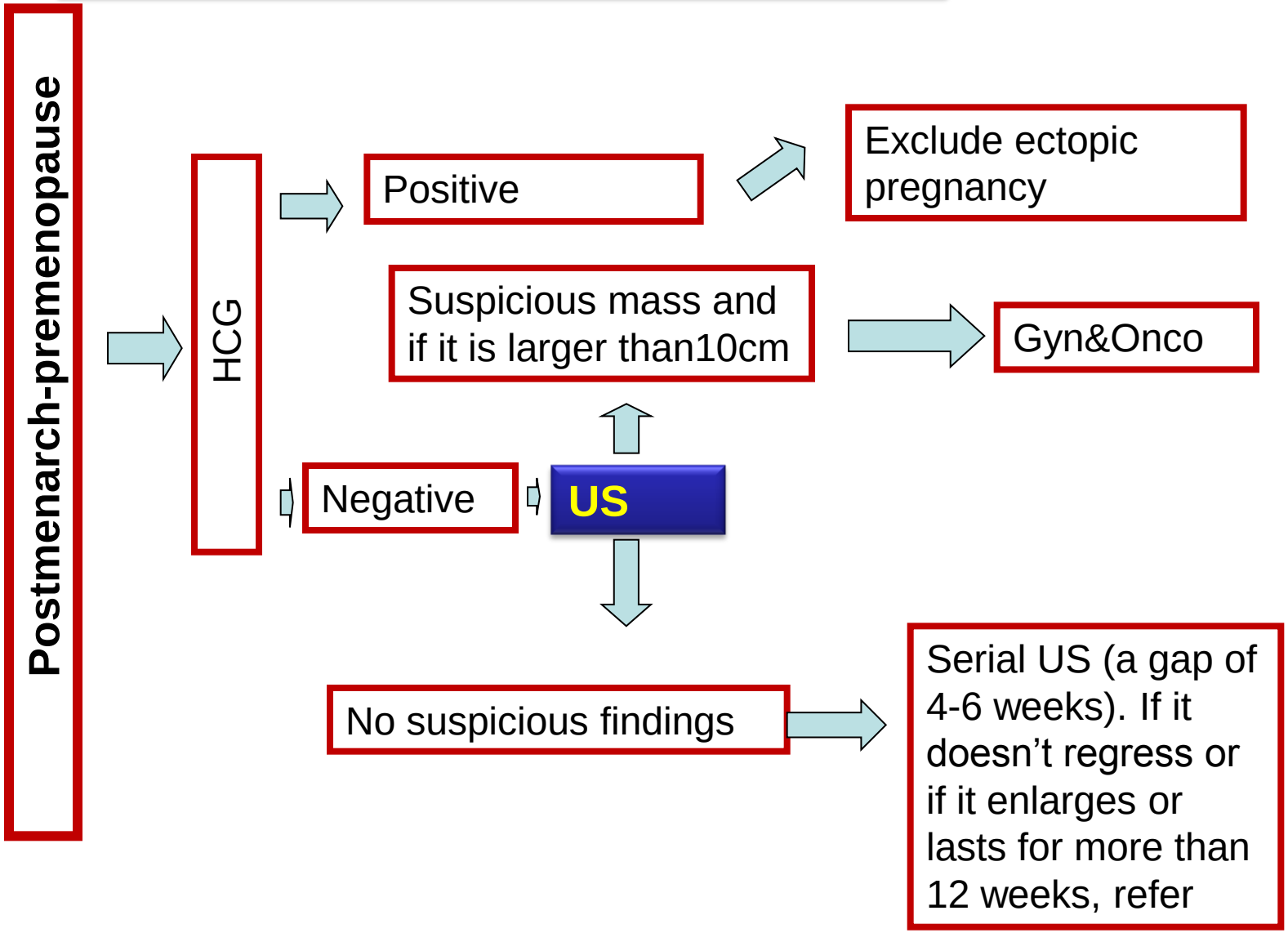
- Tumor markers are not sufficient alone
- US and tumor markers should be used together

Management

Premenopausal period

Postmenopausal period

Premenopausal Period



Adnexal Masses
Postmenopausal Period

- 2,763 postmenopausal women
- Incidence of asymptomatic ovarian cyst is 18%
- Unilocular <10 cm ovarian cyst
- Follow-up with TVS in 6-month intervals (6.5 years)

Result;

- Spontaneous resolution 70%
- Ovarian cancer absent (6.5 years)

Modesitt SC, 2003, Obstet Gynecol (Level II-1)

- **<10 cm, simple unilocular cysts could be followed up with TVS without any intervention in appropriate intervals in postmenopausal and premenopausal periods as they are thought to be benign**

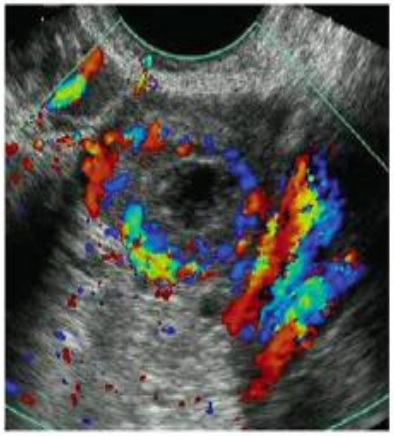
ACOG 2007

Management of Asymptomatic Ovarian and Other Adnexal Cysts Imaged at US: Society of Radiologists in Ultrasound Consensus Conference Statement[1]

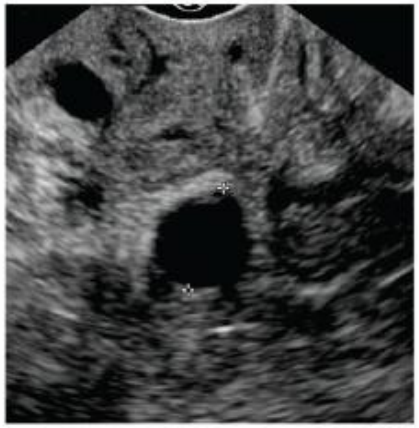
[1] From the Depts of Radiology (D.L.), Obstetrics and Gynecology (H.C.H.), and Pathology (J.L.H.), Beth Israel Deaconess Medical Ctr and Harvard Medical School, 330 Brookline Ave, Boston, MA 02215; Depts of Radiology (D.L.B.) and Obstetrics and Gynecology (M.M.), Mayo Clinic College of Medicine, Rochester, MN; Dept of Radiology, Vanderbilt Univ Medical Ctr, Nashville, TN (R.F.A.); Dept of Radiology, Brigham and Womens Hosp and Harvard Medical School, Boston, MA (B.B., C.B.B., P.M.D.); Dept of Obstetrics and Gynecology, Univ of North Carolina, Chapel Hill, NC (W.R.B); Dept of Radiology, Hosp of Univ of Pennsylvania, Philadelphia, PA (B.C.); Dept of Obstetrics and Gynecology, Univ of Kentucky, Lexington, KY (P.D.); Dept of Obstetrics and Gynecology, New York Univ Medical Ctr, New York, NY (S.R.G.); Depts of Radiology, Urology, and Pathology, Johns Hopkins Univ School of Medicine, Baltimore, MD (U.M.H); Dept of Radiology, Albert Einstein Medical Ctr, Philadelphia, PA. (M.H.); Dept of Radiology, Mayo Clinic College of Medicine, Scottsdale, AZ (M.D.P.); Dept of Obstetrics and Gynecology, David Geffen School of Medicine at UCLA, Los Angeles, CA (L.D.P.); Dept of Obstetrics and Gynecology, Wayne State Univ, Detroit, MI (E.P.); Depts of Radiology; Epidemiology and Biostatistics; and Obstetrics, Gynecology, and Reproductive Medicine, Univ of California, San Francisco, CA (R.S.B.).
Received Jan 27, 2010; revision requested Mar 8; revision received Mar 30; accepted Mar 31; final version accepted Apr 5. **Address correspondence to** D.L. (e-mail: *dlevine@bidmc.harvard.edu*).

The Society of Radiologists in Ultrasound convened a panel of specialists from gynecology, radiology, and pathology to arrive at a consensus regarding the management of ovarian and other adnexal cysts imaged sonographically in asymptomatic women. The panel met in Chicago, Ill, on October 27–28, 2009, and drafted this consensus statement. The recommendations in this statement are based on analysis of current literature and common practice strategies, and are thought to represent a reasonable approach to asymptomatic ovarian and other adnexal cysts imaged at ultrasonography.

Radiology, 2010

Normal Appearance		Follow-up*	Comments
Normal ovary appearance: Reproductive age Follicles • Thin and smooth walls • Round or oval • Anechoic • Size ≤ 3 cm • No blood flow		Not needed	Developing follicles and dominant follicle ≤ 3 cm are normal findings
Normal ovary appearance: Reproductive age Corpus luteum • Diffusely thick wall • Peripheral blood flow • Size ≤ 3 cm • +/- internal echoes • +/- crenulated appearance		Not needed	Corpus luteum ≤ 3 cm is a normal finding

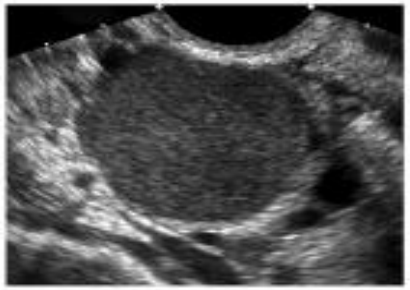
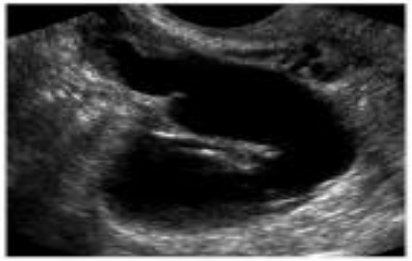
Society of Radiologists in Ultrasound Consensus Conference Statement

Normal Appearance		Follow-up*	Comments
Normal ovary appearance: Postmenopausal • Small • Homogenous		Not needed	Normal postmenopausal ovary is atrophic without follicles
Clinically inconsequential: Postmenopausal Simple cyst ≤ 1 cm • Thin wall • Anechoic • No flow		Not needed	Small simple cysts are common; cysts ≤ 1 cm are considered clinically unimportant

Society of Radiologists in Ultrasound Consensus Conference Statement

Cysts with benign characteristics		Follow-up*	Comments
Simple cysts (includes ovarian and extraovarian cysts) • Round or oval • Anechoic • Smooth, thin walls • No solid component or septation • Posterior acoustic enhancement • No internal flow		Reproductive age: ≤ 5 cm: Not needed > 5 & ≤ 7cm: Yearly Postmenopausal (PM): > 1 & ≤ 7 cm: Yearly** Any age: > 7 cm: Further imaging (e.g., MRI) or surgical evaluation	Simple cysts, regardless of age of patient, are almost certainly benign For cysts ≤ 3 cm in women of reproductive age, it is at discretion of interpreting physician whether to describe them in imaging report
Hemorrhagic cyst • Reticular pattern of internal echoes • +/- Solid appearing area with concave margins • No internal flow		Reproductive age: ≤ 5 cm: Not needed > 5 cm: 6-12 week follow-up to ensure resolution Early PM: 0-5 year Any size: Follow-up to ensure resolution Late PM: Consider surgical evaluation	Use Doppler to ensure no solid elements For cysts ≤ 3 cm in women of reproductive age, it is at the discretion of interpreting physician whether to describe them in imaging report

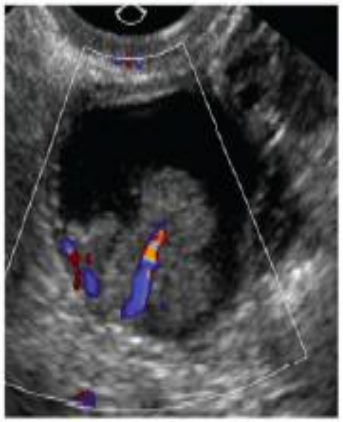
Society of Radiologists in Ultrasound Consensus Conference Statement

Cysts with benign characteristics		Follow-up*
Endometrioma • Homogeneous low level internal echoes • No solid component • +/- Tiny echogenic foci in wall		Any age: Initial follow-up 6–12 weeks, then if not surgically removed, follow-up yearly
Dermoid • Focal or diffuse hyperechoic component • Hyperechoic lines and dots • Area of acoustic shadowing • No internal flow		Any age: If not surgically removed, follow-up yearly to ensure stability
Hydrosalpinx • Tubular shaped cystic mass • +/- Short round projections "beads on a string" • +/- Waist sign (i.e. indentations on opposite sides). • +/- Seen separate from the ovary		Any age: As clinically indicated
Peritoneal inclusion cyst • Follow the contour of adjacent pelvic organs • Ovary at the edge of the mass or suspended within the mass • +/- Septations		Any age: As clinically indicated

Society of Radiologists in Ultrasound Consensus Conference Statement

Cysts with indeterminate, but probably benign, characteristics		Follow-up*	Comments
Findings suggestive of, but not classic for, hemorrhagic cyst, endometrioma or dermoid		Reproductive age: 6–12 week follow-up to ensure resolution. If the lesion is unchanged, then hemorrhagic cyst is unlikely, and continued follow-up with either ultrasound or MRI should then be considered. If these studies do not confirm an endometrioma or dermoid, then surgical evaluation should be considered. Postmenopausal: Consider surgical evaluation	
Thin-walled cyst with single thin septation or focal calcification in the wall of a cyst		Follow-up based on size and menopausal status, same as simple cyst described above	
Multiple thin septations (< 3 mm)		Consider surgical evaluation	Multiple septations suggest a neoplasm, but if thin, the neoplasm is likely benign
Nodule (non-hyperechoic) without flow		Consider surgical evaluation or MRI	Solid nodule suggests neoplasm, but if no flow (and not echogenic as would be seen in a dermoid) this is likely a benign lesion such as a cystadenofibroma

Society of Radiologists in Ultrasound Consensus Conference Statement

Cysts with characteristics worrisome for malignancy		Follow-up*	Comments
Thick (> 3 mm) irregular septations		Any age: Consider surgical evaluation	
Nodule with blood flow		Any age: Consider surgical evaluation	

Society of Radiologists in Ultrasound Consensus Conference Statement

Department of Obstetrics and Gynecology, Faculty of Medicine, Gaziantep University: Approach to Adnexal Masses

- Menopause / Premenopause
- TVS (morphological diagnostic criteria)
- CA-125
- Presence of ascites

Eur J Gynaecol Oncol. 2007;28(1):45-7.

Serum CA-125 is a good predictor of benign disease in patients with postmenopausal ovarian cysts.

Dikensoy E, Balat O, Ugur MG, Ozkur A, Erkilic S.

Department of Obstetrics and Gynecology, Gaziantep University, Gaziantep, Turkey.

Abstract

AIM: To determine whether serum CA-125 levels, in addition to tumor size and ultrasonographic findings can help in differentiating benign ovarian cysts from malignant disease.

METHODS: All postmenopausal women who had undergone explorative laporatomy for a preoperative diagnosis of an adnexal cyst between January 1999 and February 2006 were included if serum CA-125 levels were below 50 IU/ml.

RESULTS: Ninety-three patients with ovarian cysts and serum CA-125 levels lower than 50 IU/ml were included. Seventy-five (80%) of the patients (53 unilocular, 22 multilocular) had ovarian cysts < 13 cm. Of 18 patients with ovarian cysts > 13 cm, seven had unilocular and 11 had multilocular cysts. All the patients (n = 77) with a serum CA-125 level < 35 IU/ml had benign histopathology regardless of the tumor size or ultrasonic features. Among 16 patients with CA-125 levels between 35 and 50 IU/ml, two with unilocular cysts > 13 cm and nine with multilocular cysts (3 < 13 cm, 6 > 13 cm) had borderline histopathology.

CONCLUSION: We concluded that when unilocular ovarian cyst size is < 13 cm and serum CA-125 levels are below 35 IU/ml in a postmenopausal woman, the possibility of a benign etiology is most likely.

Department of Obstetrics and Gynecology, Faculty of Medicine, Gaziantep University (1999-2006)

- **Postmenopausal ovarian cyst**
- **> 50 years old, 93 cases**

❑ Tumor size	>13 cm	<13 cm
❑ Morphological evaluation	Unilocular	Multilocular
❑ Tumor markers (CA 125)	< 35 IU/ml	35-50 IU/ml

✓In 77 patients with CA 125 < 35 IU/ml, all cases were found to be **benign**, independent from the size and morphological structure of the tumor

✓All unilocular lesions <13 cm in size were **benign**

✓In 16 patients with CA 125 between 35 - 50IU /ml, 11 were **borderline**

Eur J Gynaecol Oncol. 2007;28:45-7

Serum CA-125 is a good predictor of benign disease in patients with postmenopausal ovarian cysts

E. Dikensoy[1], *M.D.*; O. Balat[1], *M.D.*; M.G. Ugur[1], *M.D.*; A. Ozkur[2], *M.D.*; S. Erkilic[3], *M.D.*

[1]Department of Obstetrics and Gynecology, [2]Department of Radiology, [3]Department of Pathology, Gaziantep University, Gaziantep (Turkey)

Table *Tumor size, ultrasonographic findings and pathological results.*

Tumor size	Serum CA-125	Diagnosis of Pathology				N	p value
		Benign	%	Borderline	%		
< 13 cm	≤ 35 IU/ml	69	100	0	0	69	0.000
	35-50 IU/ml	3	50	3	50	6	
> 13 cm	≤ 35 IU/ml	8	100	0	0	8	0.001
	35-50 IU/ml	2	20	8	80	10	
Total		82	88.2	11	11.8	93	

Table *Comparison of tumor size, serum CA-125 levels and pathological results.*

Tumor size	Ultrasonographic findings	Pathological diagnosis				N	p value
		Benign	%	Borderline	%		
< 13 cm	Unilocular	53	100	0	0	53	0.023
	Multilocular	19	86.4	3	13.6	22	
> 13 cm	Unilocular	5	71.4	2	28.6	7	0.278
	Multilocular	5	45.5	6	54.5	11	
Total		82	88.2	11	11.8	93	

Eur J Gynaecol Oncol. 2007;28:45-7

Do high levels of CA 19-9 in women with mature cystic teratomas of the ovary warrant further evaluation?

M.G. Ugur[1], E. Ozturk[1], O. Balat[1], E. Dikensoy[1], S. Teke[1], A. Aydin[2]

[1]Department of Obstetrics and Gynecology, [2]Department of Pathology, Gaziantep University, Faculty of Medicine, Gaziantep (Turkey)

Summary

Purpose: To evaluate the serum levels of tumor markers (particularly CA 19-9) in patients with ovarian mature cystic teratomas (MCT) with respect to age, size, bilaterality, menopause, presence of adhesions, complications and the postoperative levels. *Methods:* We evaluated clinical characteristics and tumor markers of 157 patients with MCT of the ovary operated at our clinic. *Results:* CA19-9 was the only tumor marker with a mean serum level (46.95 ± 101.11 U/ml) above the cut-off value and the elevated rate was 33.1%. Tumor size, presence of adhesions and CA 125 levels were significantly higher in patients with elevated CA 19-9. Bilaterality rate was 10.8%. The most common complication was torsion (6.4%). *Conclusion:* We suggest that elevated levels of CA 19-9 may be expected in MCTs of the ovary and that they will probably be decreased postoperatively. Therefore, postponing evaluation of other possible sources of CA 19-9 elevation in asymptomatic and young patients is more common sense.

Key words: Tumor markers; CA 19-9; Mature cystic teratoma; Ovary; Adhesion.

Eur. J. Gynecol Oncol. 2012, 2, 207-9

Do high levels of CA 19-9 in women with mature cystic teratomas of the ovary warrant further evaluation?

Department of Obstetrics and Gynecology, Faculty of Medicine, Gaziantep University 2001-2010

- ❑Suspicion of dermoid cyst (US)
- ❑157 cases
- ❑Tumor markers (CA 125-19.1%, CA 19-9 -33.1%, CA 15-3 -18.9%, CEA -15.4%, AFP - 4%)
- ❑**In the group with high CA 19-9** (33.1%)
  - -**Tumor size**
  - **-Presence of adhesion**
  - **-Increase in CA 125 level**

  was found to be significantly higher

✓*High levels of CA 19-9 can be expected in dermoid cysts, especially in young patients*

✓*Tumor markers become normal in postoperative period*

✓***There is no need for examination of other foci such as gastrointestinal system in young patients with dermoid cysts and high CA 19-9 levels if there is no other clinical sign***

Eur. J. Gynecol Oncol. 2012, 2, 207-9

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Review

Surgical management of a suspicious adnexal mass: A systematic review ☆

Allan L. Covens [a], Jason E. Dodge [b], Christina Lacchetti [c,*], Laurie M. Elit [d], Tien Le [e], Michaela Devries-Aboud [f], Michael Fung-Kee-Fung [e,**] and Gynecology Cancer Disease Site Group

- The sensitivity and specificity of frozen diagnosis of adnexal masses is 89.2% and 97.9%, respectively
- Systematic lymphadenectomy and surgical staging prolong survival (early-stage ovarian cancer)
- Fertility protective approach (Borderline tumor and Stage I, Grade I ovarian cancers)
- Appropriate surgical staging could be done with LT or LS.
- The risk of intraoperative rupture of capsule is more common in patients undergoing LS than LT

The effect of intraoperative rupture of capsule on survival

Poor prognostic	Not prognostic
Paulsen T. Et al. Vergote I et al. Bakkum-Gamez JN et al. …….	Dembo AJ etal. Sevelda P et.al. Sjövall K. et. All. ……..

- **is contraversial. There is no ideal prospective randomized study.**

For resurgery

(definitive diagnosis is malignant) when should the patient be operated?

- Appropriate surgery within 1-3 weeks

Adnexal Mass: Management

- Follow-up:

  ≤ 7 cm unilocular simple ovarian cysts

  ≤ 5 cm complex cysts (CA125 Normal)
- Surgery:
- Intraoperative frozen (gold standard)
- Fertility sparing surgery
- Radical surgery

Summary

Suspicious adnexal mass

(Anamnesis, physical examination, Tm markers, imaging)

Surgery (LS-LT)

Intraoperative evaluation (surgery and frozen)

Appropriate surgery (Benign, BOT, Early stage ovarian ca, advanced stage ovarian ca)

Definitive diagnosis after surgery and referral of the patient

ENYGO ACTIVITIES in 2013

ENYGO Sessions at ESGO18, 2013 followed by Tree planting and the ENYGO party

ENYGO workshop on Radiology (CT and USS) in gynaecological oncology

Teaching the Teachers Workshops

Cadaveric Workshop in Surgical Anatomy and Advanced Laparoscopic surgery

ENYGO Elections, newsletters, surveys, and more