

Vaginal Sacrocolporectomy: vaginal approach without mesh

Peter Hillemanns
Department of Obstetrics and Gynecology
Medical University Hannover, Germany



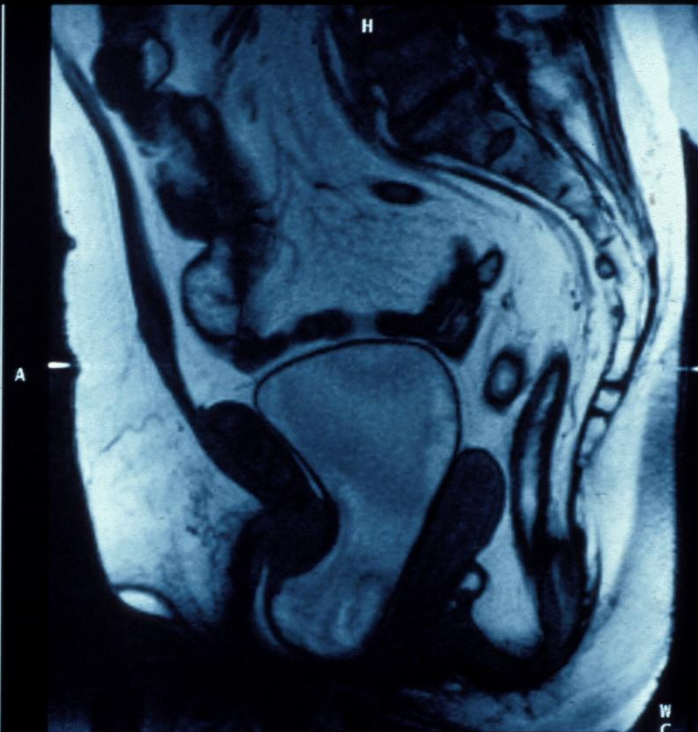
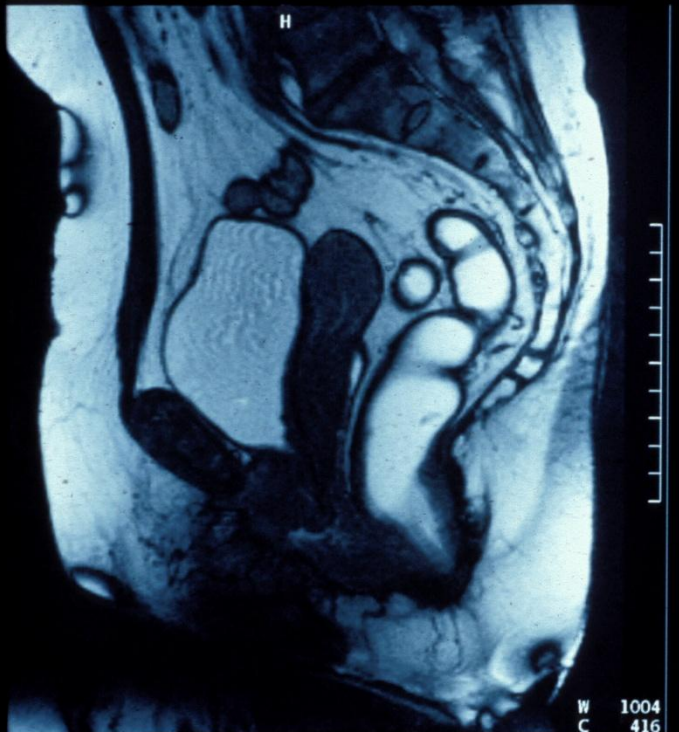
Medizinische Hochschule
Hannover

Cystocele

Enterocoele – Uterine prolapse

Rectocele

Lateral Defect



Conservative Therapy?

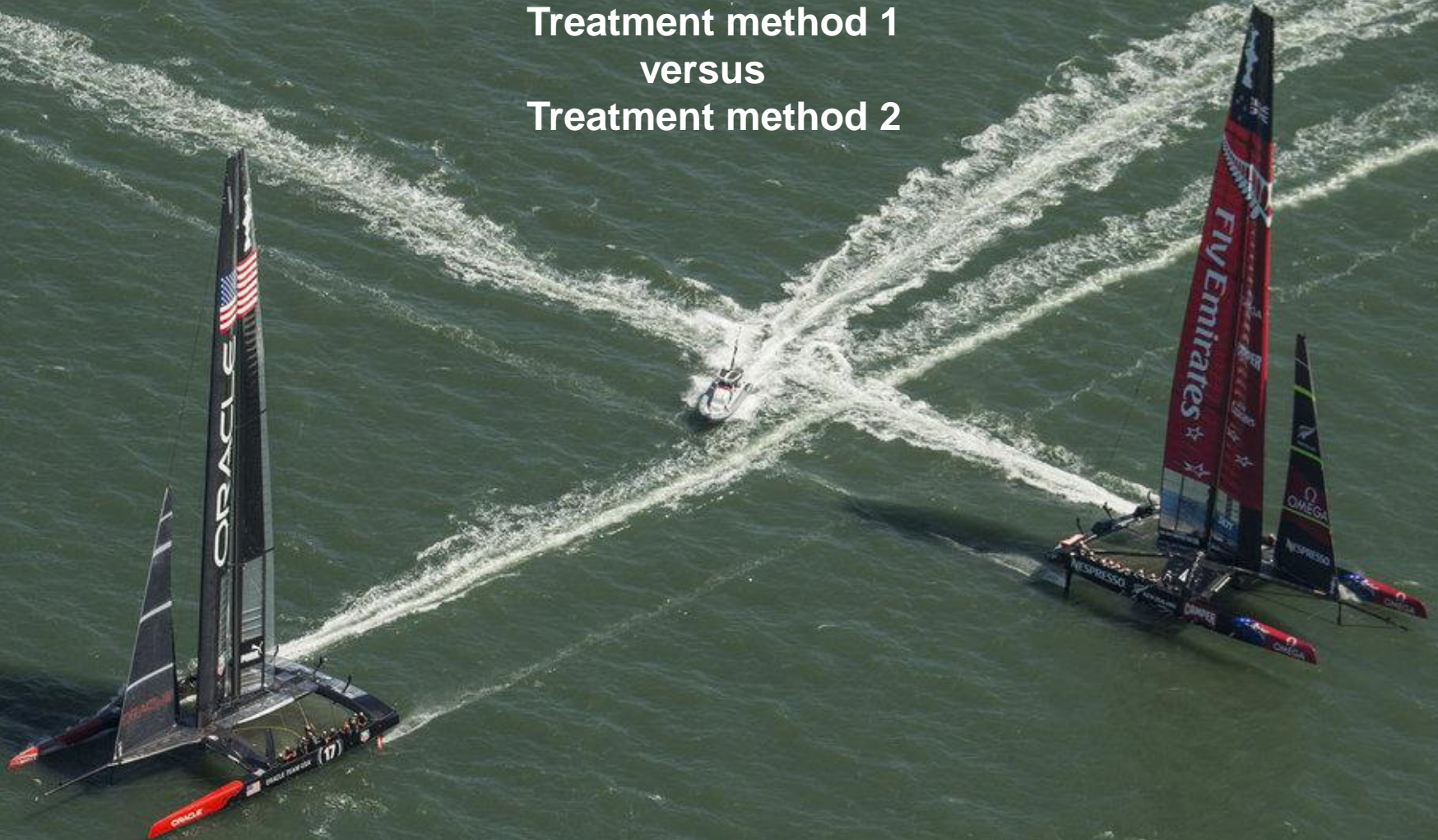


Treatment Methods for Pelvic Organ Prolapse

Vaginal – abdominal – laparoscopic approaches

- conservative methods (pessar therapies)
- colporrhaphia anterior et posterior (classical repair)
- vaginal sacrospinal fixation (Amreich-Richter)
- laparoscopic and abdominal sacrocolpopexy
- robotic surgery
- use of mesh material
- vaginal sacrocolpopexy

Treatment method 1
versus
Treatment method 2



Operation method	Defect of anterior compartment	Defect of posterior compartment	Defect of central compartment
Vaginal Approach	Colporrhaphia anterior (+/- paravaginal correction)	Colporrhaphia posterior	Vaginaefixatio Amreich-Richter
			Vaginal Sacrocolporecto-pexy
Abdominal Approach	(Abdominal Sacrocolporecto-pexy; +/- paravaginal correction)	(Abdominal Sacrocolporecto-pexy)	Abdominal Sacrocolporecto-pexy
Laparoscopic Approach	(Laparoscopic Sacrocolporecto-pexy)	(Laparoscopic Sacrocolporecto-pexy)	Laparoscopic Sacrocolporecto-pexy
Vaginal Approach (mesh)	Mesh	Mesh	Mesh

Surgical management of pelvic organ prolapse in women (Review)

Maher C, Feiner B, Baessler K, Schmid C

Implications for practice
The data from randomised trials are currently insufficient
to guide practice.

**THE COCHRANE
COLLABORATION®**

56 randomised controlled trials were identified
evaluating 5954 women

This is a reprint of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in *The Cochrane Library*
2013, Issue 4

<http://www.thecochranelibrary.com>

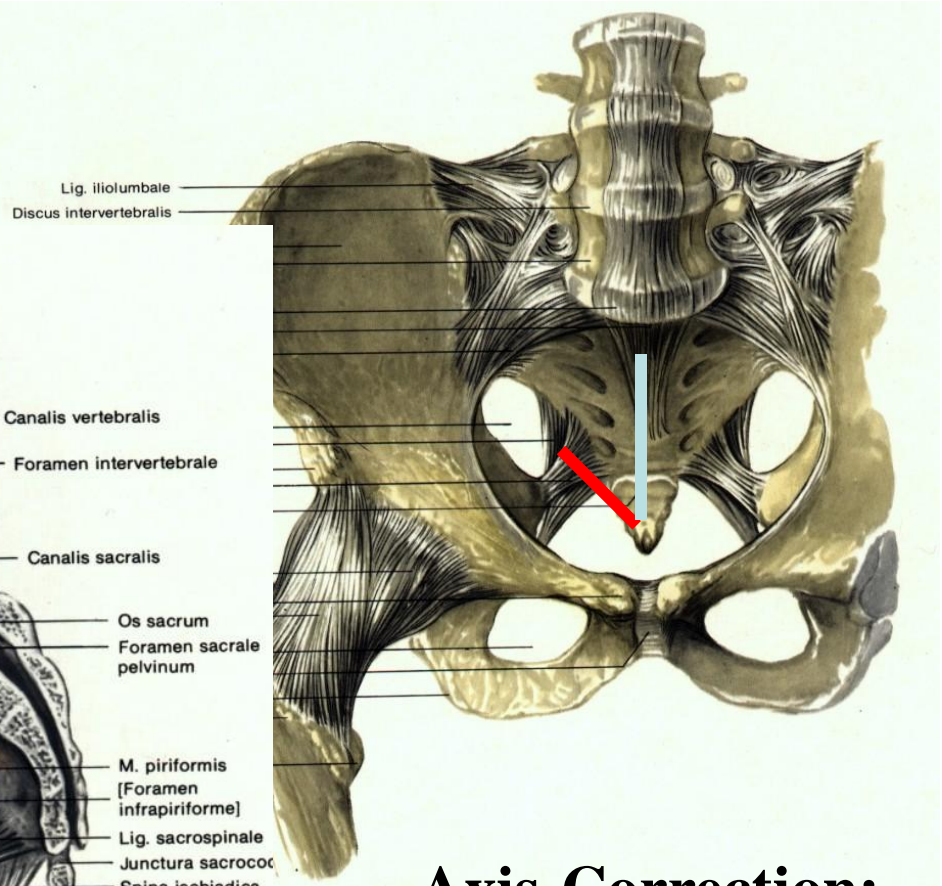
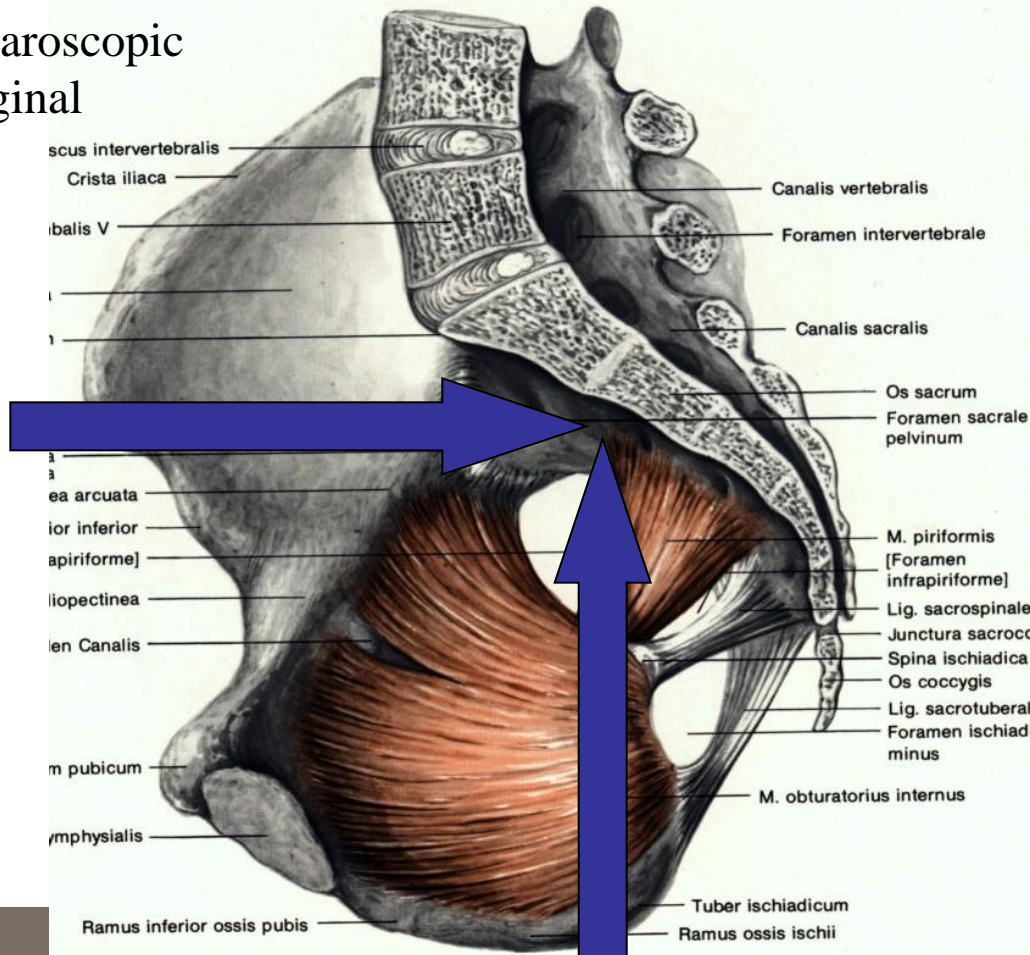
Comparison 1. Surgery for upper vaginal (vault or uterine) prolapse

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Number of women with prolapse symptoms (subjective failure)	6		Risk Ratio (M-H, Random, 95% CI)	Subtotals only
1.1 abdominal sacral colpopexy vs vaginal sacrospinous colpopexy	2	169	Risk Ratio (M-H, Random, 95% CI)	0.52 [0.25, 1.09]
1.2 abdominal sacro-hysteropexy versus vaginal hysterectomy plus anterior and/or posterior colporrhaphy at 1 year	1	82	Risk Ratio (M-H, Random, 95% CI)	3.2 [1.29, 7.92]
1.3 abdominal sacro-hysteropexy versus vaginal hysterectomy plus anterior and/or posterior colporrhaphy at 8 years	1	84	Risk Ratio (M-H, Random, 95% CI)	2.6 [1.02, 6.65]
1.4 vaginal sacrospinous colpopexy vs posterior intravaginal slingplasty	1	66	Risk Ratio (M-H, Random, 95% CI)	0.67 [0.12, 3.73]
1.5 laparoscopic sacral colpopexy vs total vaginal polypropylene mesh	1	108	Risk Ratio (M-H, Random, 95% CI)	0.26 [0.03, 2.25]
1.6 uterosacral colpopexy vs vaginal polypropylene mesh	1	59	Risk Ratio (M-H, Random, 95% CI)	2.36 [0.26, 21.42]
2 Number of women unsatisfied with surgery	2		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected
2.1 abdominal sacral colpopexy vs vaginal sacrospinous colpopexy	1		Risk Ratio (M-H, Fixed, 95% CI)	0.0 [0.0, 0.0]
2.2 vaginal sacrospinous colpopexy vs posterior intravaginal slingplasty	1		Risk Ratio (M-H, Fixed, 95% CI)	0.0 [0.0, 0.0]
3 Number of women who visited a physician after surgery because of pelvic floor symptoms	1		Risk Ratio (M-H, Fixed, 95% CI)	Totals not selected
3.1 abdominal sacro-hysteropexy versus vaginal hysterectomy plus anterior and/or posterior colporrhaphy	1		Risk Ratio (M-H, Fixed, 95% CI)	0.0 [0.0, 0.0]
4 Patient global impression Improvement PGI-I (very much better)	1	47	Risk Ratio (M-H, Fixed, 95% CI)	0.96 [0.65, 1.42]
4.1 open versus laparoscopic sacral colpopexy	1	47	Risk Ratio (M-H, Fixed, 95% CI)	0.96 [0.65, 1.42]

Sacrospinal vs Sacrocolpo-pexy

Approach:

- abdominal
- laparoscopic
- vaginal



**Axis-Correction:
dorsal-
versus anatomical**

Central Compartment Prolaps

(Vaginal vault prolaps, uterine prolaps)

Abdominal Sacrocolpo-pexy

versus vaginal sakrospinal fixation

- Lower rate of recurrences
- Lower rate of dyspareunia
- Longer time for surgery
- Longer rekonvalescence
- Increased costs

Central Compartment Prolapse

(Vaginal vault prolaps, uterine prolaps)

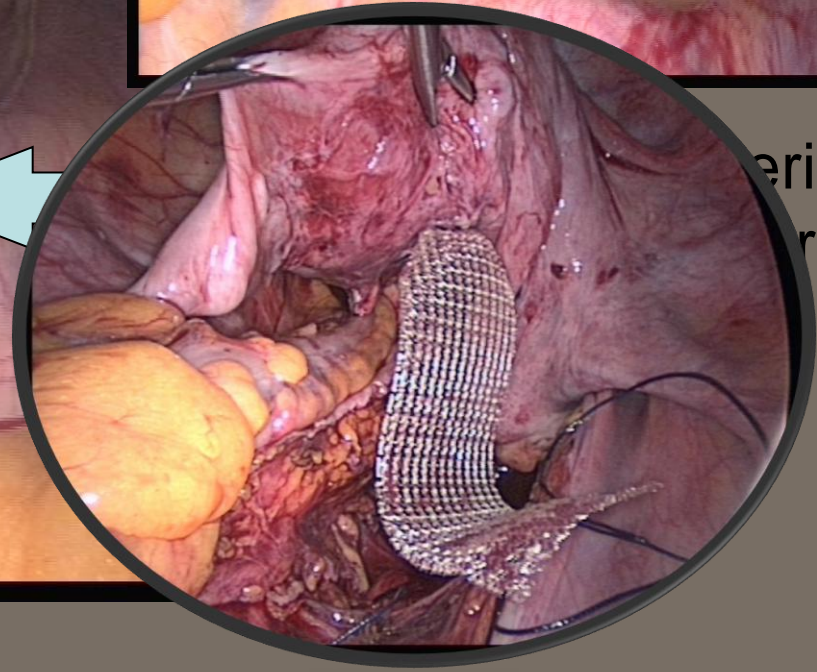
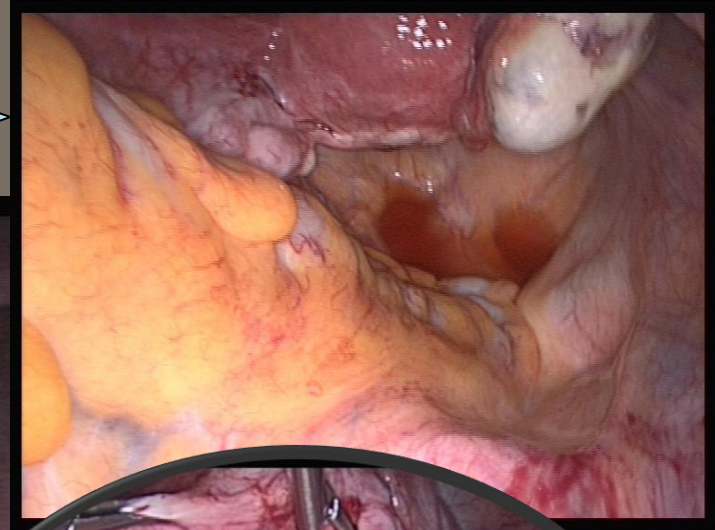
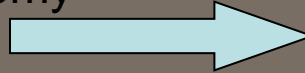
Abdominal Sacrocolpopexy

versus vaginal uterosacral sacrospinal fixation
versus transvaginal polypropylen-mesh-implantation

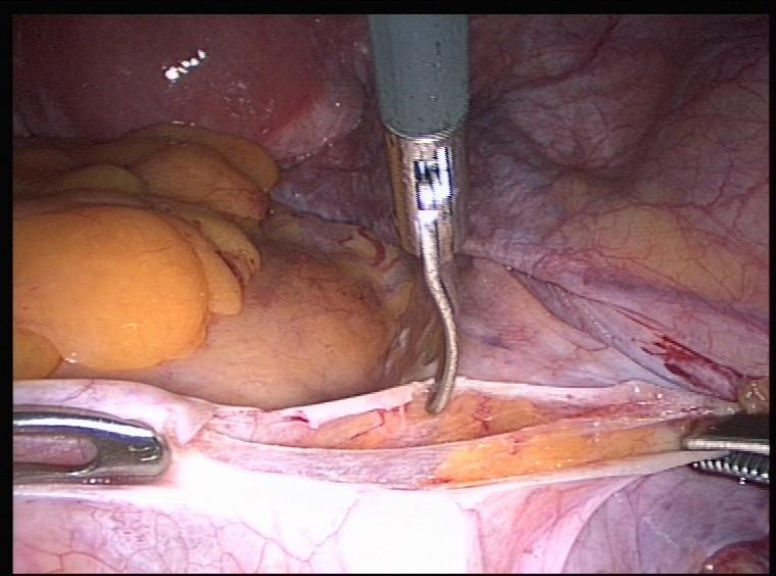
- Few studies
- Increased succes rates
- Lower Re-operation rate

Laparoscopic Utero-Sacropexy

Normal Uterus with normal right ovary
St. post left salpingo-ovarectomy



peritoneum
rum





THE COCHRANE
COLLABORATION

Central Compartment Prolapse

(Vaginal vault prolaps, uterine prolaps)

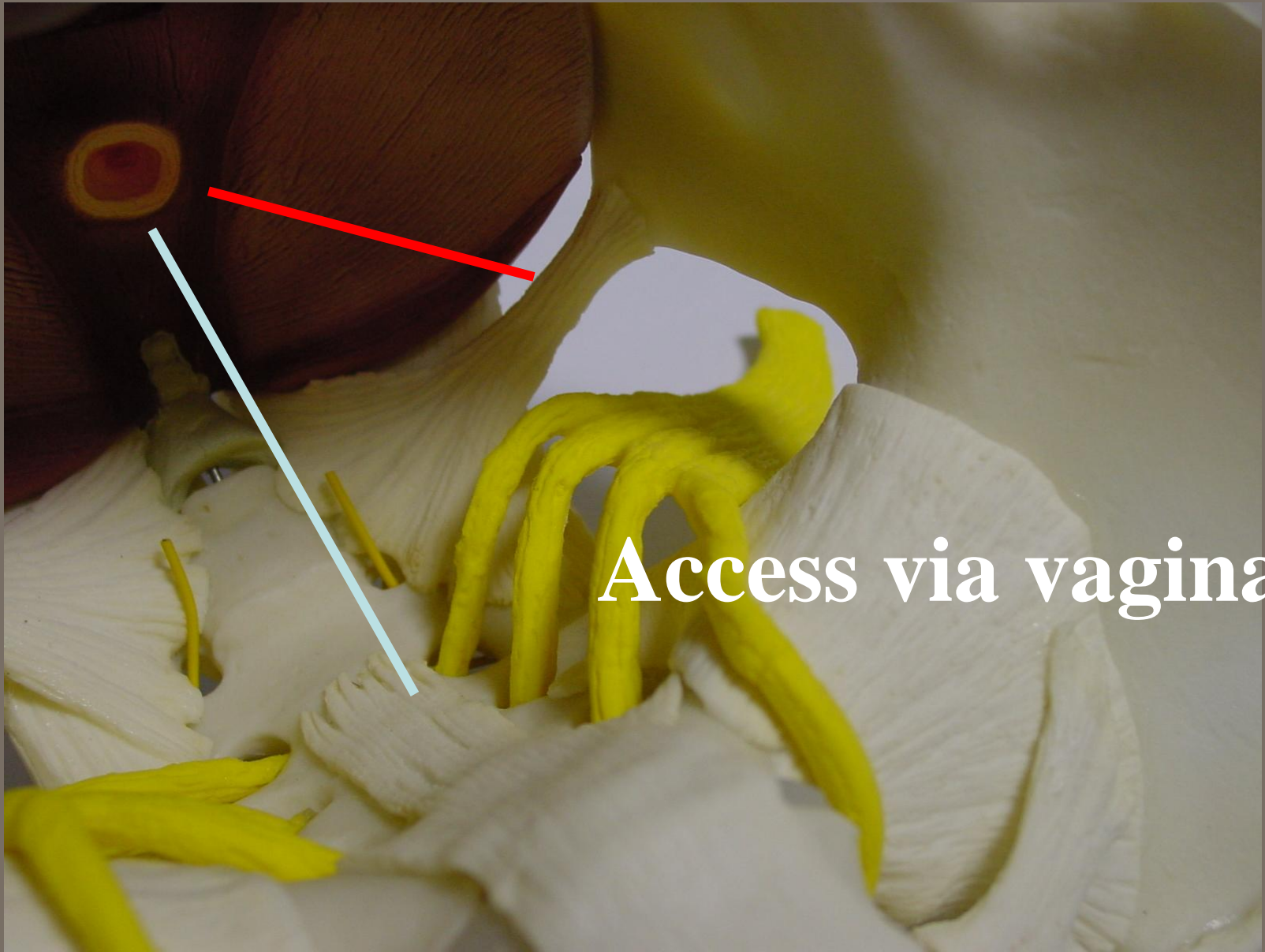
Laparoskopische Sacrocolpopexy (⇔ open ⇔ robotics)

Small studies!

No definitive statements possible!

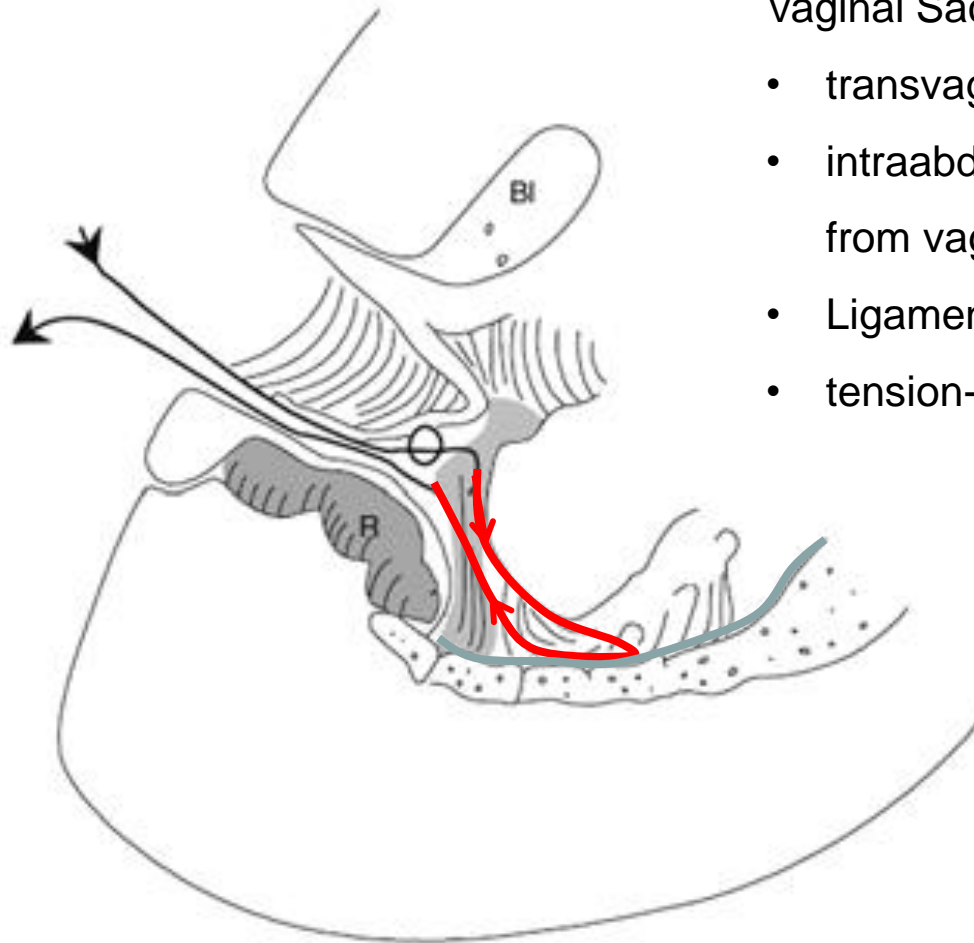
- Few studies
- Increased success rates
- Lower Re-operation rate

Sacrocolpopexy versus Sacrospinal



Access via vagina?

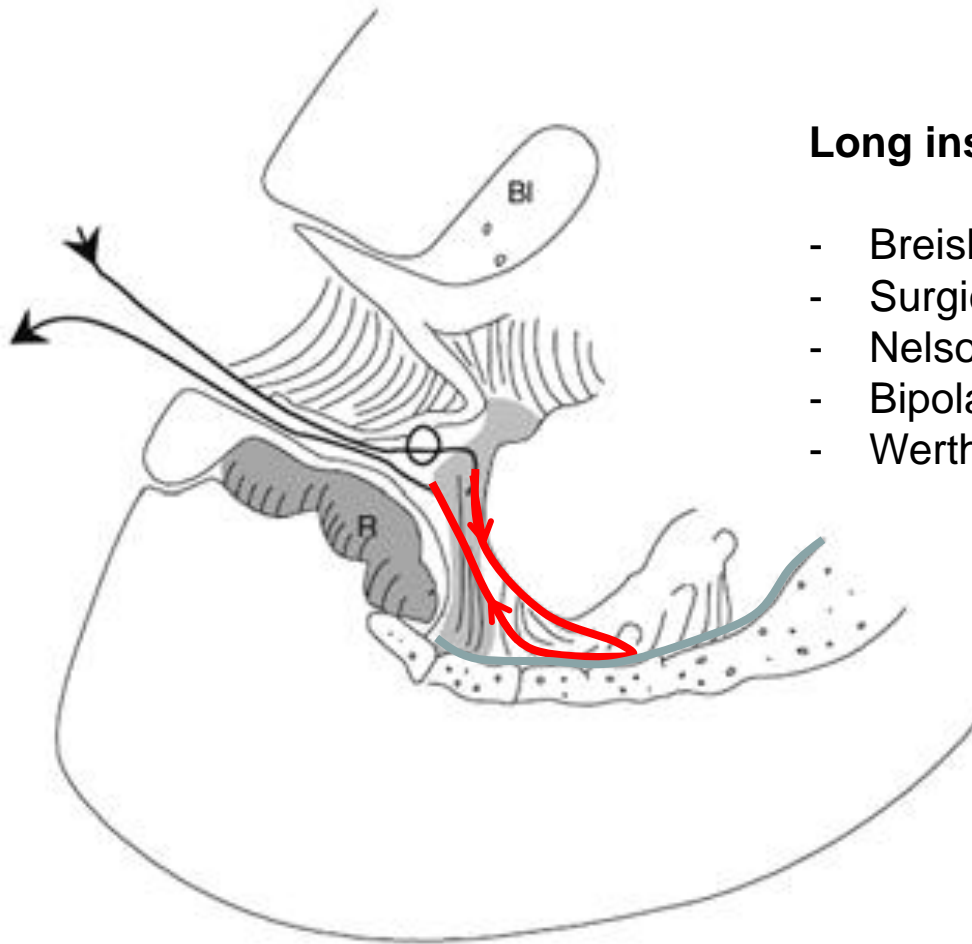
Vaginal Sacrocolporectopexy



Vaginal Sacrocolporectopexy:

- transvaginal fixation of vaginal vault (black)
- intraabdominal placement of sutures (red) from vaginal end through meso-rectum
- Ligamentum longitudinale anterius (blue)
- tension-free placed knots (circle)

Vaginal Sacrocolporectopexy

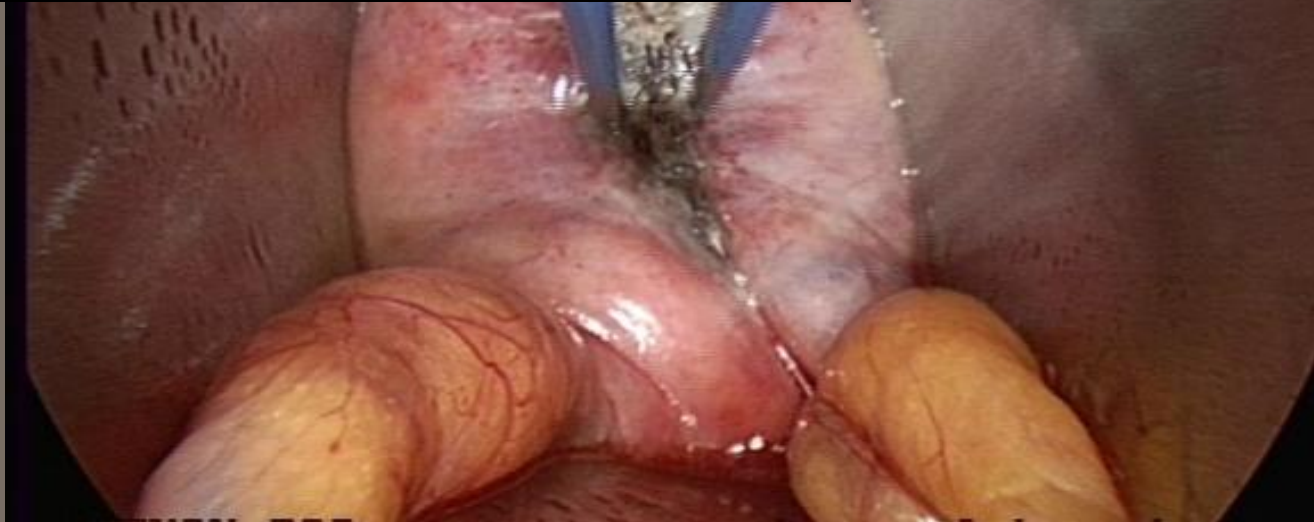


Long instruments for vaginal surgery:

- Breisky specula 180 x 40 mm, 230 x 40 mm
- Surgical and anatomical forceps 30 cm
- Nelson scissors 28.5 cm
- Bipolar forceps 30 cm, needle holder 30 cm
- Wertheim or Masson needle holder 27 cm

Vaginal Sacrocolporectomy

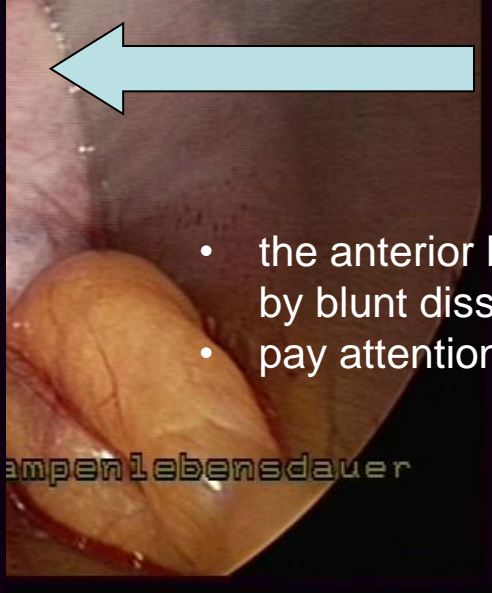
The rectum is moved to the left and the intestinal convolution pushed/packed out of the pelvis with one to two gauze swabs.



Vaginal Sacrocolporectopexy



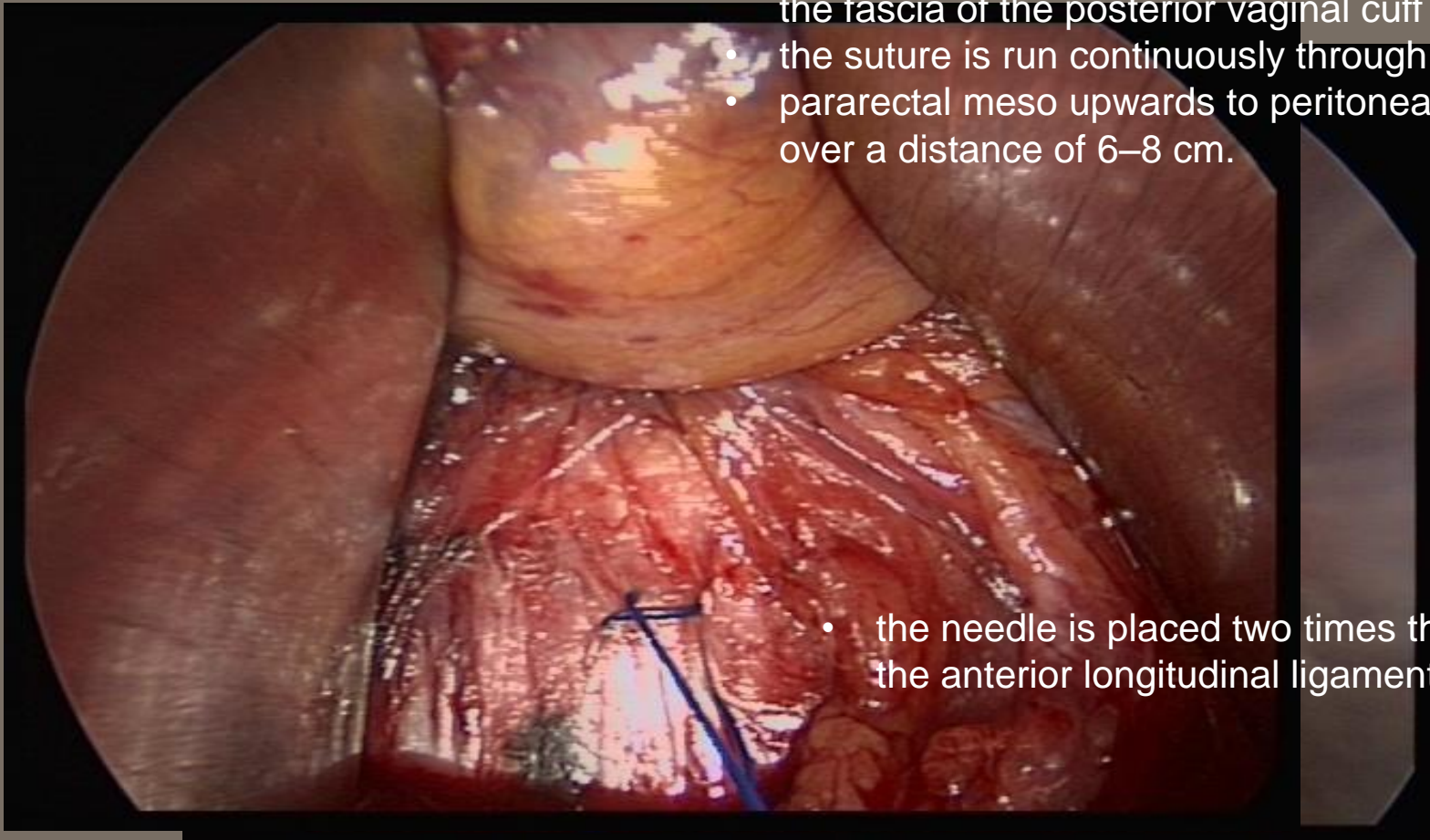
- Visualize, coagulate, and make a medial incision of the pre-sacral peritoneum



- the anterior longitudinal ligament is visualized by blunt dissection
- pay attention to the vasa sacralis mediana

Vaginal Sacrocolporectopexy

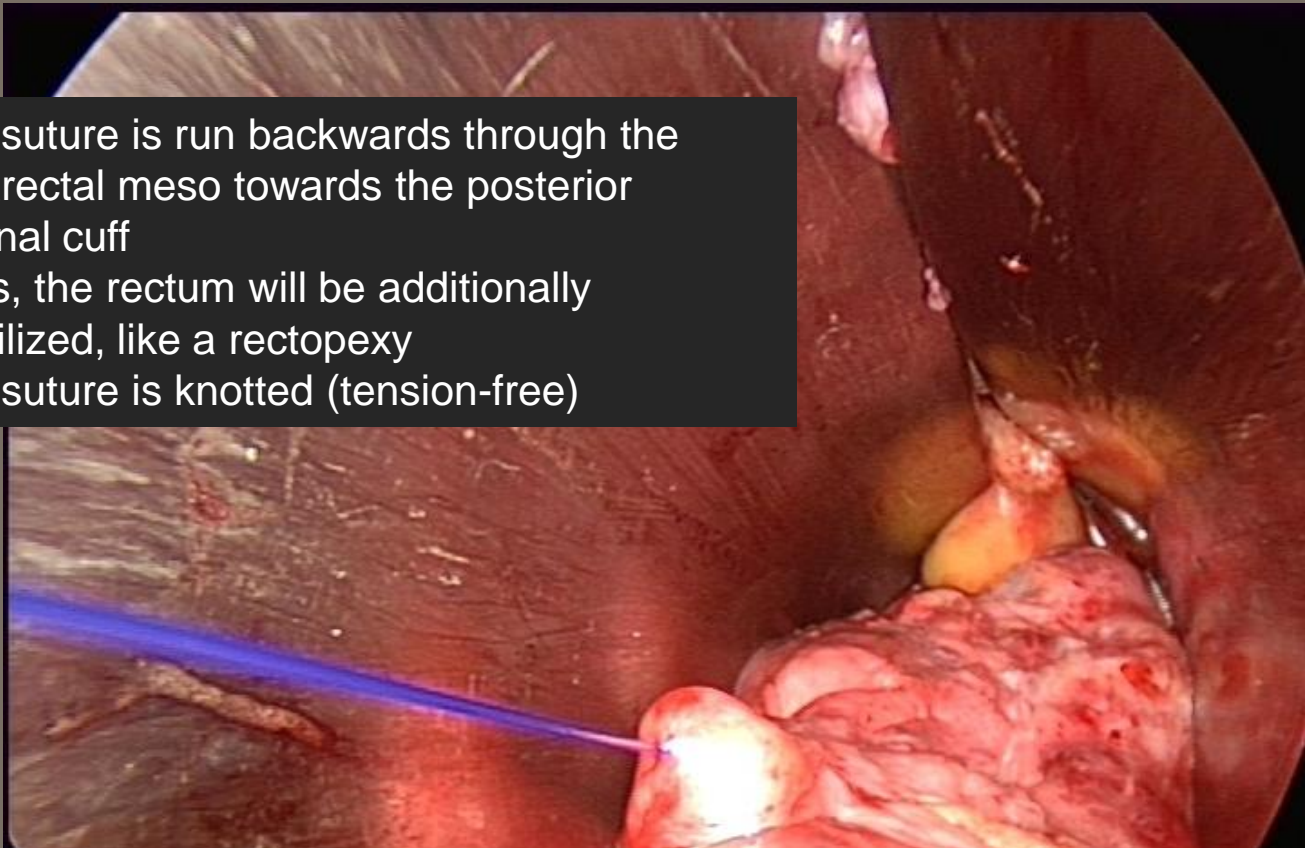
- Place a nonresorbable monophylic 0 suture through the fascia of the posterior vaginal cuff
- the suture is run continuously through the right pararectal meso upwards to peritoneal incision over a distance of 6–8 cm.



- the needle is placed two times through the anterior longitudinal ligament

Vaginal Sacrocolporectopexy

- The suture is run backwards through the pararectal meso towards the posterior vaginal cuff
- Thus, the rectum will be additionally stabilized, like a rectopexy
- The suture is knotted (tension-free)



Vaginal Sacrocolporectopexy



- The suture is run backwards through the pararectal meso towards the posterior vaginal cuff
- Thus, the rectum will be additionally stabilized, like a rectopexy
- The suture is knotted (tension-free)

Vaginal Sacrocolporectopexy

Arch Gynecol Obstet
DOI 10.1007/s00404-012-2495-z

GENERAL GYNECOLOGY

Vaginal sacrocolporectopexy for the surgical treatment of uterine and vaginal vault prolapses: confirmation of the surgical method and perioperative results of 101 cases

**Hermann Hertel · Susanne Grüßner ·
Stylios Kotsis · Peter Hillemanns**

Received: 21 May 2012 / Accepted: 19 July 2012
© Springer-Verlag 2012

Vaginal sacrocolporectopexy for the surgical treatment of uterine and vaginal vault prolapses: confirmation of the surgical method and perioperative results of 101 cases

Results

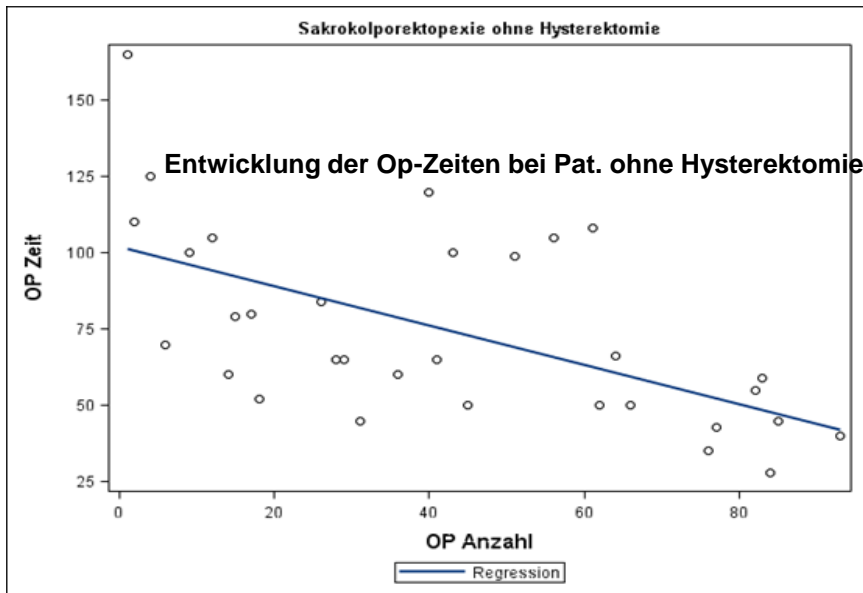
Simultaneous surgery (anterior, posterior, lateral repair)

101 Pat.	Prolaps uteri (n)	Prolaps vaginae (n)	Plastik anterior (n)	Plastik posterior (n)	OP Korr. Enterocele (n)	lateral repair (n)
	69	32				
Grad II	36	13				
Grad III-IV	33	19				
Zystocele Grad II	41	17	54			4
Zystocele Grad III-IV	22	8	29			1
Rektocele Grad II	20	6		18		
Rektocele Grad III-III	8	9		17		
Enterocele	0	1			1	
Stressinkontinenz	8	9	14			

Vaginal Sacrocolporectopexy

Results

Time for surgery



with hysterectomy: 76 (40-219) min
w/o hysterectomy: 70 (28-165) min

Complications

3 bladder lesions (3%), 1 hematoma (1%)

Bleeding

3 ischialgiform pain, 3x suture detached

Hospitalisation

mean Hb decrease of 1,9 g/dl

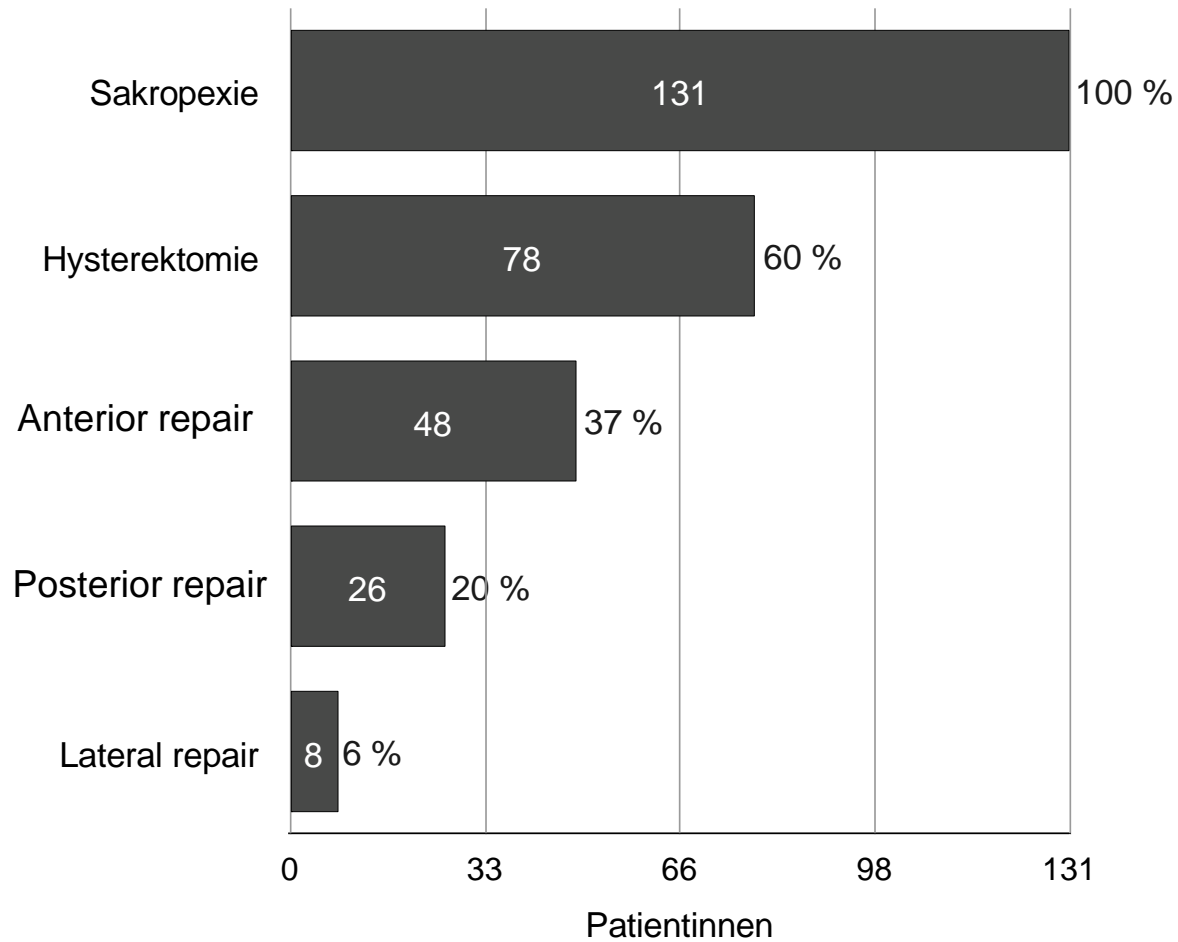
median 5 days

P-QOL – Questionnaire (Prolapse-Quality of Life)

Digesu et al. Int Urogynecol J (2005) 16: 176-181
Lenz et al. Int Urogynecol J (2009) 20: 641-649

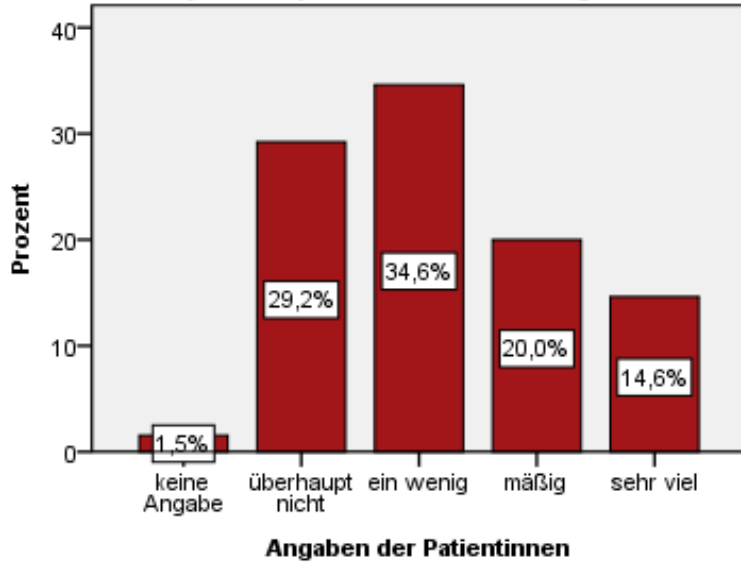
- 220 patients
- vaginal sacrocolporectopexy
- vaginal uterosacrorectopexy
- Mailing of questionnaire
- 180 patients received questionnaire
- **72% returned questionnaire**

Surgical methods included

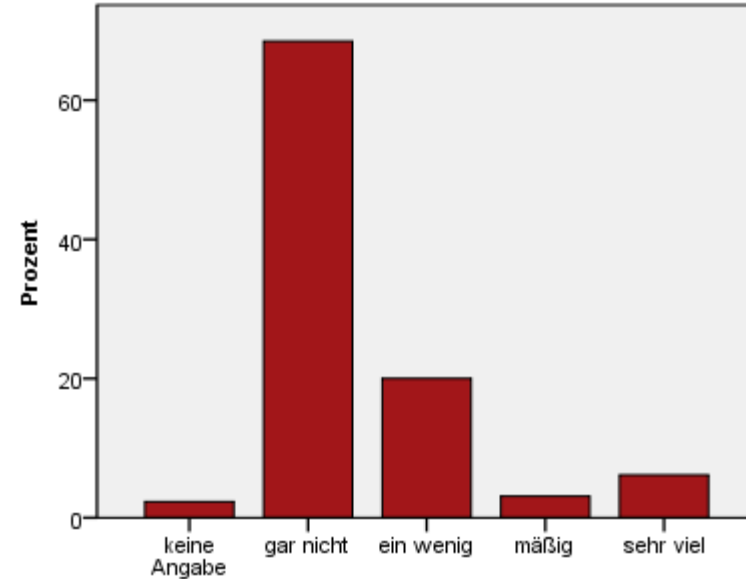


P-QOL - Questionnaire: subjective complaints

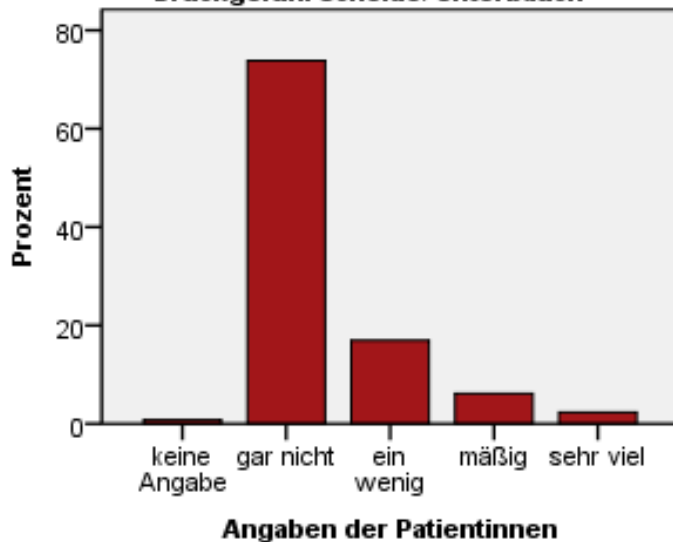
Subjektiv empfundene Einschränkung



Auswölbungsgefühl

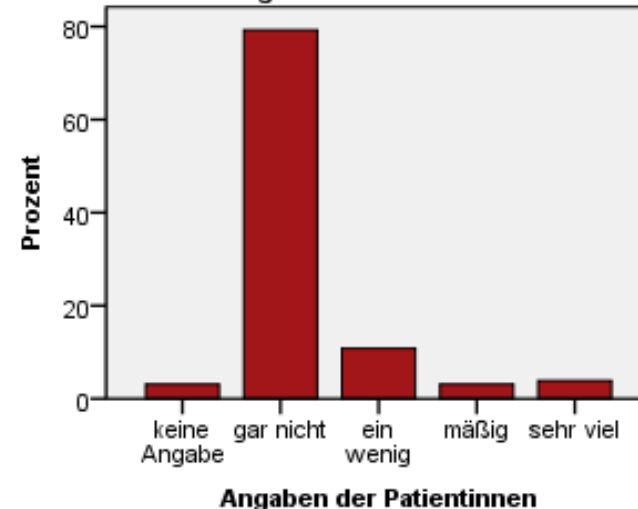


Druckgefühl Scheide/ Unterbauch

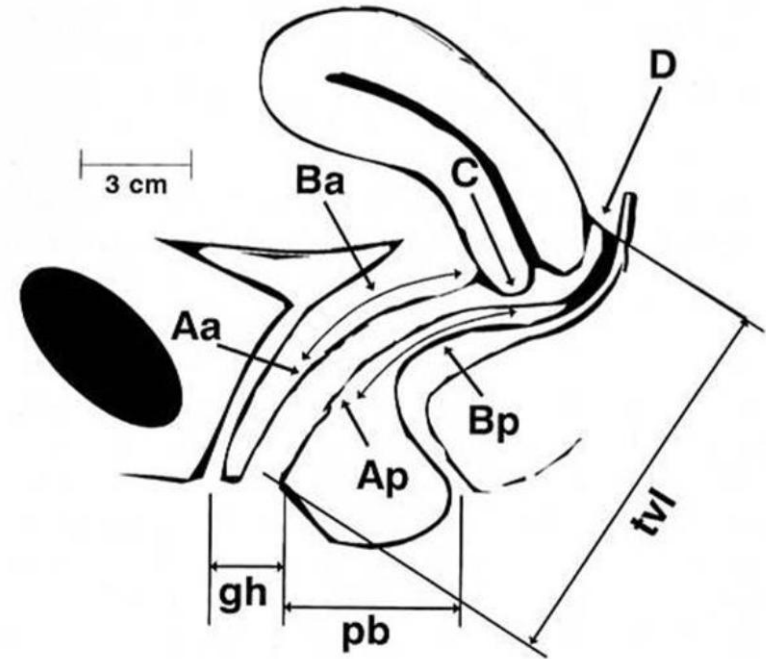


Angaben der Patientinnen

Druckgefühl im Stehen



Urogynecological follow-up examinations



Follow up: 38 Monate (4-81)

Patients: n=84/131 (64%)

Apikal success rate: n=79/84 (94%)

Recurrent cystocele: n=5/84 (6%)

**According to our current data:
Vaginal sacrocolporectopexy
is a safe, effective and
moneysaving method for
surgical correction of
sub-/total vaginal vault - or
uterine prolaps**

See youtube movie of this methode:

<http://www.youtube.com/watch?v=NMDrZqAnP3c>

Operation method	Defect of anterior compartment	Defect of posterior compartment	Defect of central compartment
Vaginal Approach	Colporrhaphia anterior (+/- paravaginal correction)	Colporrhaphia posterior	1. Vaginal sakrospinal fixation
			Vaginal Sacrocolporecto-pexy
Abdominal Approach	(Abdominal Sacrocolporecto-pexy; +/- paravaginal correction)	(Abdominal Sacrocolporecto-pexy)	Abdominal Sacrocolporecto-pexy
Laparoscopic Approach	(Laparoscopic Sacrocolporecto-pexy)	(Laparoscopic Sacrocolporecto-pexy)	Laparoscopic Sacrocolporecto-pexy
Vaginal Approach (mesh)	Mesh	Mesh	Mesh

**Thank you
for your attention!**

