Vaginal Sacrocolporectopexy: vaginal approach without mesh

Peter Hillemanns
Department of Obstetrics and Gynecology
Medical University Hannover, Germany
Cystocele
Enterocele – 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
Disclosure

Treatment method 1
versus
Treatment method 2
<table>
<thead>
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<td>Vaginal Approach (mesh)</td>
<td>Mesh</td>
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</table>
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.

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

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

Approach:
- abdominal
- laparoscopic
- vaginal

Axis-Correction: dorsal- versus anatomical
Central Compartiment 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 polypropylene-mesh-implantation

• Few studies
• Increased succes rates
• Lower Re-operation rate
Laparoscopic Utero-Sacroplasty

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

- 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 Sacrocolporectopexy

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 monophyllic 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

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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 · Stylianos Kotsis · Peter Hillemanns

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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)

<table>
<thead>
<tr>
<th>101 Pat.</th>
<th>Prolaps uteri (n)</th>
<th>Prolaps vaginae (n)</th>
<th>Plastik anterior (n)</th>
<th>Plastik posterior (n)</th>
<th>OP Korr. Enterocele (n)</th>
<th>lateral repair (n)</th>
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<tr>
<td>Grad II</td>
<td>69</td>
<td>32</td>
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<tr>
<td>Grad III-IV</td>
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<td>Zystocele Grad II</td>
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<td>Enterocele</td>
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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%)
- 3 ischialgiform pain, 3x suture detached

Bleeding
- mean Hb decrease of 1.9 g/dl

Hospitalisation
- median 5 days
P–QOL – Questionnaire (Prolapse-Quality of Life)


- 220 patients
- vaginal sacrocolpopolectopexy
- vaginal uterosacrorectopexy
- Mailing of questionnaire
- 180 patients received questionnaire
- 72% returned questionnaire
Surgical methods included

- **Sakropexie**: 131 (100%)
- **Hysterektomie**: 78 (60%)
- **Anterior repair**: 48 (37%)
- **Posterior repair**: 26 (20%)
- **Lateral repair**: 8 (6%)
P–QOL – Questionnaire: subjective complaints
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 method: http://www.youtube.com/watch?v=NMDrZqAnP3c
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