Uterine Preservation

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Uterovaginal Prolapse in a 49-year-old Woman Desiring Surgery

Reasons to leave uterus:

- Surgery is a little less morbid, easier, and faster
- Informed patient request; personal, ethnic, religious reasons
- Maintains fertility potential
- Help maintain libido and body image in some women
- Few supporting studies with long-term outcomes
Uterovaginal Prolapse in a 49-year-old Woman Desiring Surgery

Reasons to remove uterus:

- Presence of uterine or cervical disease, PMB
- Cancer prevention; removes fear of cancer
- Informed patient request
- Removes need for future surgery to remove uterus (?5% chance)
- More supporting data on prolapse outcomes
- Easier to do vaginal colpopexy
Surgery and Patient Choice*

ABSTRACT: Acknowledgment of the importance of patient autonomy and increased patient access to information has prompted more patient-generated requests for surgical interventions not necessarily recommended by their physicians. Decision making in obstetrics and gynecology should be guided by the ethical principles of respect for patient autonomy, beneficence, nonmaleficence, justice, and veracity. Each physician should exercise judgment when determining whether information presented to the patient is adequate. When working with a patient to make decisions about surgery, it is important for obstetricians and gynecologists to take a broad view of the consequences of surgical treatment and to acknowledge the lack of firm evidence for the benefit of one approach over another when evidence is limited.

Is it ethical to perform an elective cesarean delivery for a woman with a normal pregnancy, a prophylactic oophorectomy for a 30-year-old patient with no family history of ovarian cancer, or a tubal ligation for an 18-forceps use, cesarean delivery, and breastfeeding. The purpose of this Committee Opinion is to provide the obstetrician–gynecologist with an approach to decision making based on ethics in an environment of increased
Indications for Uterine Preservation

- Patient who wants to preserve her uterus (personal choice)
- Questions about sexual function
- Emotional/ psychological/ religious ties
- Young patient with prolapse who wishes to preserve fertility
Pre-operative Evaluation  
(Expert Opinion)

- Pap with HPV
- May consider EMB or TVUS, if post-menopausal
- Careful consent with patient – I recommend against uterine preservation if she has PMB
Uterine Preservation Surgeries for Uterovaginal Prolapse

- Uterosacral ligament shortening/plication
- Sacrospinous hysteropexy
  - Sutured
  - Mesh-augmented
- Sacrohysteropexy
  - Open
  - Laparoscopy
  - Robotic
- Mesh-augmented (other types)
Uterosacral Ligament Shortening

- Can be done vaginally, laparoscopically, or abdominally
- Good option for those who wish to maintain fertility and plan future childbearing
- Good option for medically complicated patients
Sacrospinous Ligament

Know anatomy first
Anterior Vaginal Approach

- Identify ischial spine and clean off SSL
- 2-4 permanent sutures through ligament (Suturing device)
- Pass suture through ipsilateral vaginal apex 1 cm lateral to cervix and cervical stroma
- Tie sutures down elevating uterus to SSL
Suture Delivery Device
<table>
<thead>
<tr>
<th>Author/Year</th>
<th>N</th>
<th>Procedure</th>
<th>Duration</th>
<th>Failure</th>
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<tbody>
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<td>Richardson, 1989</td>
<td>5</td>
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<td>6 – 24 mo</td>
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<td>Kovac et al, 1993</td>
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<td>Maher et al, 2001</td>
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<td></td>
<td>36</td>
<td>VH</td>
<td>33 mo</td>
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<td>Van Brummen et al, 2003</td>
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<td>SS hysteropexy</td>
<td>19 mo</td>
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<td>Dietz, 2007</td>
<td>60/133</td>
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<td>22.8 mo</td>
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<td>Dietz, 2009</td>
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<td>SS hysteropexy</td>
<td>12 mo</td>
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<tr>
<td>Romazi, 2012</td>
<td>200</td>
<td>USL hysteropexy</td>
<td>&gt;6 mo</td>
<td>4%</td>
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Mesh Kit
Uphold – anatomic and subjective outcomes

- N = 115
- Single Center
- N = 53 with uterus intact (hysteropexy)
- Follow-up variable
- Evaluated with POP-Q and validated questionnaires
- Failure rate defined as Aa or Ba or C ≥ 0
- Recurrence rate of 1.89%
  - No anterior recurrences
  - 1 apex recurrence
- Mesh exposure of 2.6%
  - Only 1 mesh exposure in hysteropexy group

Hysterosacrocolpopexy

- Surgical technique
- Cure rates for open procedure are 91-100%
- Improved quality of life and sexual function
- Sparse data regarding laparoscopic or robotic sacro-hysterocolpopexy

E Barranger et al, AJOG 2003
E Constantini et al, European Urol 2005
Laparoscopic Hysterosacral Colpopexy

Arms go around uterus at level of internal os through windows in the broad ligament.
Hysterosacral Colpopexy
<table>
<thead>
<tr>
<th>Author/Year</th>
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<th>Duration</th>
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<td>Stoesser</td>
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<td>Addison</td>
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<td>51 mo</td>
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<tr>
<td>Author/Year</td>
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<td>Procedure</td>
<td>Duration</td>
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<td>Wu</td>
<td>7</td>
<td>High McCall suspension</td>
<td>9 – 17 mo</td>
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<td>Obrien</td>
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<td>Round ligament suspension</td>
<td>3 – 18 mo</td>
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<td>Uterosacral suspension</td>
<td>6 - 32 mo</td>
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<td>2001</td>
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<td>16% re-op</td>
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<tr>
<td>Diwan</td>
<td>25</td>
<td>Uterosacral plication</td>
<td>40 wks</td>
<td>2% 0 re-op</td>
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<td>2005</td>
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<td>TVH</td>
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<td>5% 2 re-op</td>
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<td>Krause</td>
<td>57/81</td>
<td>Laparoscopic sacral suture hysteropexy</td>
<td>20.3 mo</td>
<td>5.3% - cervix</td>
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</table>
How I use hysteropexy

- Young, active woman who desires uterine sparing procedure, does not plan future childbearing
  - Dual mesh sacral hysteropexy

- Young, active woman who desires uterine sparing procedure, plans future childbearing
  - Sacral hysteropexy with posterior mesh only, A+P
  - Sometimes add SIS graft anteriorly
How I use hysteropexy

- Post-menopausal woman who desires uterine sparing procedure
  - Dual mesh sacral hysteropexy
  - Sacrospinous hysteropexy
    - With or without mesh
  - Uterosacral ligament hysteropexy
Conclusions

- Feasible
- Decreased OR time, blood loss and recovery
- Patient should understand
  - Future possibility of uterine or cervical pathology, or of pregnancy if fertile
  - Limited data regarding longevity and complications of procedure
Hysterosacral Colpopexy

Take Home Message

- Understand the contraindications
  - Negative uterine pathology must be confirmed
  - This particular technique is not recommended in women desiring future childbearing
  - Option is biologic graft or tunneling arms underneath Cardinal ligament and ureter

- Review the risks and benefits thoroughly with the patient
  - Future hysterectomy may be more difficult

- The procedure leads to improved anatomical outcomes and resolution of anterior apical vaginal wall and uterine prolapse