Options for Vaginal Prolapse

Michelle Y. Morrill, M.D.
Director of Urogynecology
The Permanente Medical Group
Kaiser, San Francisco

Assistant Professor, Volunteer Faculty
Department of Obstetrics and Gynecology
University of California, San Francisco

What are we talking about?

- Normal relaxation of the vaginal walls (30-40% of women, 98% of postmenopausal women)
- Vaginal bulge or something falling out of the vagina
- Descent of the apex, anterior and or posterior of the vagina (almost 50% of women)

3 ACOG Practice Bulletin #85 Pelvic Organ Prolapse, September 2007

Symptoms

- Vaginal bulge
- Splinting
- Pelvic pressure
- Back pain
- Urinary complaints


Prolapse Risk Factors

Nygaard 2004 (WHI)
- Age
- Education (college worse)
- Vaginal parity
- Weight of largest baby

Miedel 2009 (Swedes)
- Family history of POP
- Hx of deficient CT (varicose viens, hernia, hemorrhoids)
- BMI, waist circumference
- Heavy lifting job
- Low impact exercise (vs. none or high impact)
Epidemiology

- ~3-8% POP Prevalence\textsuperscript{1,2}
- 11% Lifetime risk of surgery for prolapse or incontinence\textsuperscript{3}
- Olsen et al 30% of surgeries were repeats\textsuperscript{**}
  - 33/393 were >1 repeat

\textsuperscript{1} Nygaard et al. Prevalence of Symptomatic Pelvic Floor Disorders in US Women. JAMA 2008;300(11):1311-1316
\textsuperscript{2} Lukacz et al. Parity, Mode of Delivery, and Pelvic Floor Disorders. Obstet Gynecol 2006;107:1253–60
\textsuperscript{3} Olsen et al. Epidemiology of surgically managed pelvic organ prolapse and urinary incontinence.

Evaluation

- Baden Walker ‘half-way’
  - Grade 0-4
- POPQ
  - cm above or below the hymen
- Patient must be standing or straining
- Evaluate each compartment (anterior, apex and posterior) separately

Options for Treatment

- Do Nothing
- Physical Therapy
- Symptom-directed therapy
- Pessary
- Surgery

Do Nothing?

- Prolapse is not dangerous
- Reassure the patient
Do Nothing?

- 412 WHI subjects (postmenopausal) with at least 2 Baden-Walker evaluations
- Progression and regression nearly equal
- Grade 1 prolapse more likely to improve than worsen


Do Nothing?

- 259 women in WHI at one site had at least 2 POPQ exams
- 1 and 3 year change of at least 1 cm
  - Patients with prolapse above the hymen were more likely to progress
  - Patients with prolapse beyond the hymen were more likely to regress
- >2cm worsening in 5.8% after 1y
- >2cm improvement in 1.2% after 1y


Physical Therapy

- 109 Patients randomized to 3 sets of 8–12 maximum PFM contractions daily or no specific PFM instruction
- All participant advised to decrease straining
- 6 month follow-up
- Table: Patients who had an improvement in stage of prolapse

<table>
<thead>
<tr>
<th>Prolapse Stage</th>
<th>PFM training</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stage II</td>
<td>16.7%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Stage III</td>
<td>35.7%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Physical Therapy

- 109 Patients randomized to 3 sets of 8–12 maximum PFM contractions daily or no specific PFM instruction
- All participant advised to decrease straining
- 6 month follow-up
- Table: Patients who had an improvement in prolapse symptoms

<table>
<thead>
<tr>
<th></th>
<th>PFM training N=58</th>
<th>Controls N=50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased bother</td>
<td>67%</td>
<td>42%</td>
</tr>
</tbody>
</table>


Symptom Directed Therapy

- Weight control?
  - Gain bad
  - Loss doesn’t help either¹
- Avoid straining?
  - Behavior training
  - Treat constipation

Kudish et al. Effect of Weight Change on Natural History of Pelvic Organ Prolapse. Obstet Gynecol 2009;113

Pessary

- Almost any patient can be a candidate
  - Exceptions
    - Poor compliance (loss to follow-up)
    - ?vaginal infection
    - Latex allergy (no latex Inflato-Ball)
- Can significantly improve symptoms and quality of life¹,²


Pessary

- Fitting
  - POPQ not very helpful
  - Short vaginal length and large genital hiatus decrease success¹
- TRIAL and ERROR – patient expectations!

Pessary Management

- Removal
  - By patient
  - In office

- Erosions
  - Move / remove pessary
  - Vaginal estrogen, Trimo-San

*(sorry about the evidence)*


Surgery

- Identify the defect(s)
  - Apical
  - Anterior
  - Posterior

Surgery - Apical

- Important part of advanced prolapse repair

- Abdominal sacrocolpopexy superior to Vaginal sacrospinous suspension

- Meta analysis of uterosacral ligament suspension
  - Median f/u 25m
  - 98% successful apical suspension (stage 0 or 1)
  - Uterosacral suspension does not adequately treat anterior prolapse

*Surgery - Apical Systematic Review sacrocolpopexy vs. traditional vaginal repair vs. vaginal mesh kits through Jan 2008 with ≥3m f/u*

- Traditional vaginal (>7,800 pts)
  - >2.5 y mean f/u
  - 3.9% re-operation for prolapse

- Sacrocolpopexy (>5,600 pts)
  - >2y f/u
  - 2.3% re-operation for prolapse

- Vaginal mesh kits (>3,400 pts)
  - Almost 1.5y f/u
  - 1.3% re-operation for prolapse

**Surgery - Apical**

- **Systematic Review** sacrocolpopexy vs. traditional vaginal repair vs. vaginal mesh kits *through Jan 2008 with ≥3m f/u*
  - Traditional vaginal (>7,800 pts)
    - >2.5 y mean f/u
    - 5.8% re-operation *overall*
  - Sacrocolpopexy (>5,600 pts)
    - >2y f/u
    - 7.1% re-operation *overall*
  - Vaginal mesh kits (>3,400 pts)
    - Almost 1.5y f/u
    - 8.5% re-operation *overall*


**Surgery - Anterior**

- **Systematic reviews**: Anterior repair augmented with mesh superior to colporrhaphy by objective (but not subjective) outcomes.\(^1\)\(^2\)
- **OARS trial**: 99 women randomized to colporrhaphy, Pelvicol or Mesh for anterior repair
  - 2y data on 75 subjects presented at AUGS 2010

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<thead>
<tr>
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<th>Colporrhaphy</th>
<th>Pelvicol augment</th>
<th>Mesh augment</th>
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<tbody>
<tr>
<td><strong>Objective success</strong></td>
<td>43%</td>
<td>54%</td>
<td>85%</td>
</tr>
<tr>
<td><strong>Subjective success</strong></td>
<td>88.5%</td>
<td>87.5%</td>
<td>96.4%</td>
</tr>
</tbody>
</table>

\(^1\)Maher et al. for Cochrane Group Surgical management of pelvic organ prolapse in women. 2010

**Surgery - Posterior**

- **Trans-vaginal repair** is superior to trans-rectal repair.\(^1\)
- **Traditional colporrhaphy** = Graft augment.\(^2\)

1 Maher et al. for Cochrane Group Surgical management of pelvic organ prolapse in women. 2010

**Colpocleisis**

- **Effective\(^1\)**
  - 93% ≥Stage 2 at 1y
  - 94% satisfied or very satisfied at 1y
- **Safer?**
  - Less blood loss\(^2\)
  - Faster\(^2\)

Surgery - Posterior

The Evidence’ is variable

Identify the defect
- Posterior vaginal wall (site specific?)
- Perineum / Perineal Body

Caution: Defecatory complaints are frequently d/t abnormal stool consistency or defecatory dysfunction

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Surgery – Vaginal Mesh

Miller et al. presented 5 year Prolift (formerly Total Vaginal Mesh) AUPS 2010:
- 85 procedures, 90% done for anterior or combined prolapse
- 66 available for f/u at 5y
- 22% of patients had zstage 2 recurrence in same compartment
- 33% of patients had zstage 2 recurrence overall
- 7.5% re-op for prolapse
- 9/85 re-op for mesh exposure, 2 rectovaginal fistulas

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Prolapse Surgery and Incontinence

CARE study
At 2y: 12% Burch, 25% control had bothersome SUI (p = 0.004)

Occult Stress Incontinence Testing 3m post-op
- Positive test: no Burch 60% -> Burch 37% SUI
- Negative test: no Burch 37% -> Burch 20% SUI

But how relevant is this now?
Prolapse Surgery and Incontinence

- Occult Stress Incontinence
  - Cochrane (meta-analysis)\(^1\)
    - Continence surgery does not significantly reduce post-op stress incontinence
    - Significant heterogeneity in studies

- Future: OPUS\(^2\)
  - Women without SUI, having apical and/or anterior suspension
  - Randomized to TVT (Ethicon) or sham incisions

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1 Maher et al. for Cochrane Group Surgical management of pelvic organ prolapse in women. 2010

Summary

- Prolapse symptoms? Bothersome vaginal bulge

- Treatment options
  - Physical Therapy
  - Symptom-directed therapy
  - Pessary – never know until you try
  - Surgery – Identify the defect