Endometriosis preoperative evaluations and preparations

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“Endometriosis should be viewed as a chronic disease that requires a lifelong management plan with the goal of maximizing the use of medical treatment and avoiding repeated surgical procedures"
Indications for surgical treatment:

– Persistent pain despite medical therapy
– Contraindications to or refusal of medical therapy
– Need for a tissue diagnosis of endometriosis
– Exclusion of malignancy in an adnexal mass
– Obstruction of the bowel or urinary tract
Surgical intervention provides..

- A histologic diagnosis
- Allows assessment of pelvic cysts or masses with features concerning for malignancy
- Reduces pain by destroying the endometriotic implants
Disadvantages of surgery:

– Risk of injury (especially the bowel and bladder)
– Possible reduction of ovarian reserve (eg, after ovarian cyst excision)
– Adhesion formation
We typically avoid surgery in women with:

- Incompletely evaluated pelvic pain
- Persistent pelvic pain after repeated surgeries
- Women nearing menopause
SURGICAL PLANNING

- Assessing the patient's desired surgical outcome and counseling the patient regarding the extent and approach of the planned surgery
  - Conservative versus definitive surgery
  - With or without oophorectomy
  - Laparoscopy versus laparotomy
## Conservative versus definitive surgery

<table>
<thead>
<tr>
<th>Surgery</th>
<th>n</th>
<th>Rate of reoperation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Two years</td>
</tr>
<tr>
<td>Laparoscopy, both ovaries preserved</td>
<td>96</td>
<td>21</td>
</tr>
<tr>
<td>Hysterectomy, both ovaries preserved</td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td>Hysterectomy, one ovary removed</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Hysterectomy, both ovaries removed</td>
<td>50</td>
<td>4</td>
</tr>
</tbody>
</table>
Laparoscopy versus laparotomy

- **Laparoscopic surgery** is generally preferred to laparotomy;
  - improved surgical visualization (from lens magnification)
  - less pain
  - shorter hospital stay
  - quicker recovery
  - better cosmetic outcome
Laparotomy may be necessary when;
- extensive adhesions
- invasive endometriosis located near structures such as the uterine arteries, ureter, bladder, and bowel.
In addition to routine preoperative evaluation for gynecologic surgery, the preoperative evaluation includes studies pertinent to the patient's symptoms (e.g., pelvic ultrasound for pelvic pain). If DIE or extrapelvic disease is suspected, appropriate preoperative evaluation should be performed.

- DIE or extrapelvic disease? If YES:
  * Cystoscopy for evaluation or urinary symptoms
  * Colonoscopy for evaluation of hematochezia
  * MRI or rectal sonography for an obliterated pelvic cul-de-sac
  * If extrapelvic disease is suspected, appropriate preoperative evaluation should be performed
PREOPERATIVE PREPARATION
Informed consent and preoperative counseling

A review of the risks and benefits of the planned procedure compared with the risks and benefits of alternative treatment options.

Discuss long-term (greater than six months) use of postoperative hormonal treatment.
Preoperative medical suppressive therapy

– We recommend **not** giving preoperative **medical suppression** for the indication of improved surgical outcome
Thromboprophylaxis

- Use of *mechanical* or *pharmacologic* prophylaxis depends upon the procedure and patient risk factors.
<table>
<thead>
<tr>
<th>Surgical risk category*</th>
<th>Score</th>
<th>Estimated VTE risk in the absence of pharmacologic or mechanical prophylaxis (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low (see text for definition)</td>
<td>0</td>
<td>&lt;0.5</td>
</tr>
<tr>
<td>Low</td>
<td>1 to 2</td>
<td>1.5</td>
</tr>
<tr>
<td>Moderate</td>
<td>3 to 4</td>
<td>3.0</td>
</tr>
<tr>
<td>High</td>
<td>≥ 5</td>
<td>6.0</td>
</tr>
</tbody>
</table>
Antibiotic prophylaxis

Operative laparoscopy is typically a clean procedure
antibiotic prophylaxis is generally **not** indicated unless vaginal or intestinal surgery is likely

**Small intestine:** cefazolin 2-3gr

**Colorectal surgery:** cefazolin 2-3gr + metronidazole 500mg IV

**allergy to penicillins →** clindamycin(900mg) or vancomycin(15mg/kg)
+ gentamicin (5mg/kg) or ciprofloxacin(400mg)
** Prophylactic antibiotics can be begun 60 min before the procedure.

** For prolonged procedures (>3h) or those with major blood loss → additional intra operative doses should be given.
Bowel preparation

- Give prophylactic antibiotics if there is suspicion of adhesive bowel disease because of the increased risk of bowel injury.

X There is no evidence that oral antibiotics or mechanical bowel preparation further decreases the risk of infection beyond that provided by parenteral antibiotics.
Thank you for your attention