Updates in Women’s Health: Uterine fibroids

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Objectives
Recognize signs or symptoms of uterine fibroids

Identify appropriate medical treatments

Describe variety of procedural options including uterine-sparing choices
Fibroids = leiomyoma

- Benign smooth muscle tumors
- Extremely common: 70-80%

- Asymptomatic
- Bleeding
- Bulk symptoms
- Condition of the reproductive years
- Most shrink with menopause
Types of fibroids

- Submucosal (intracavitary)
- Intramural
- Subserosal
Risk Factors

**PROMOTE**
- Estrogen / progesterone
- Early age of menarche
- Prenatal exposure to DES
- Obesity
- Vitamin D deficiency
- HTN
- Diet: significant consumption of red meat,
- Alcohol

**NO EFFECT**
- Hormonal contraception

**PROTECT**
- Diet: Dairy, soy, caffeine consumption
- Smoking
- Diet: Green vegetables, fruit, dietary vitamin A (from animal sources)
Diagnosis
Pelvic Ultrasound

- Many advantages (cheap, available, painless)
- High sensitivity: 95-100%
Intracavitary evaluation

- Saline infusion sonography
- Hysteroscopy
MRI

- For more detail: if concern for malignancy, surgical planning, considering UAE
Treatment - Medications
Medication options

- Bleeding
  - Combined E/P
    - OCPs
    - NuvaRing
  - Progestin-only
    - Oral
    - DepoProvera
    - Nexplanon
    - LNG IUD
  - Lysteda (tranexamic acid)

*nonhormonal*

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Franciscan Health
Data on Lysteda

- 43-63% of patients will have clinically significant improvement in their bleeding
  - Higher rates of improvement than progestins
  - Less adverse events

- Better bleeding profile with LNG IUD

Medication options

- Shrink fibroids (temporary use only)
  - Lupron IM (leuprolide)

- Oriahnn (elagolix/estradiol/norethindrone)
  - TWICE daily

- Myfembree (relugolix/estradiol/norethindrone)
  - ONCE daily

GnRH Antagonists (oral)

- Approved for fibroids, heavy menstrual bleeding x 24 months

**Pivotal Trial for Myfembree**
- 84% reduction in menstrual blood loss including a 50% amenorrhea rate
- Among women with mod/severe pain, 43-47% had meaningful reduction in pain
- Uterine volume decrease was not statistically significant

- Adverse events: Hot flashes most common, bone density equal to placebo

Treatment – Procedural Options
Case

- 40yo with a massively enlarged multi-fibroid uterus causing severe bulk symptoms
- Exam: 22-24week-sized uterus
Clip of 1kg fibroid uterus (lap total hysterectomy)
Uterine-sparing fibroid treatments

1. **Remove**: Myomectomy
2. **Occlude**: Uterine artery embolization (IR)
3. **Zap**: Radiofrequency ablation
   - Acessa (Lap-RFA)
   - Sonata (transcervical – RFA)
   - Focused ultrasound (HIFU=high-intensity focused US)
Myomectomy (laparoscopic or robotic)

Figure 6. (a) laparoscopic enucleation of a fibroid with (b) reconstruction of the uterine wall.
Robotics
Case

- SM fibroid impacting fertility, causing abnormal uterine bleeding
Hysteroscopy
Video H/S myomectomy
Open Myomectomy
Uterine artery embolization

Success Rates

Definition = resolution of HMB, anemia, pelvic pressure

91.2%

One year: 73% reduction in myoma volume
Outcomes: EMMY trial

Uterine artery embolization (UAE) versus hysterectomy

- At 2 years, 23.5% of patients who had UAE had subsequently had hysterectomy
- At 5 years, 28.4% underwent hysterectomy
UAE and Fertility??

- Retrospective cohort 389 patients
  - Age <43yo
  - 148 pregnancies -> 109 live births
    - 74 full-term
    - 23 pre-term

Laparoscopic ultrasound-guided radiofrequency ablation

Acessa
Outcomes after RFA

- Meta-analysis looking at short-term (3, 6mo) and long-term outcomes (12,24,36mo)
- Quality of life improved until 36months (most remained stable in the 12-36mo range)
- Uterine volume decreased 45-62% reduction
- Reintervention rate: 4.39%
- Adverse events 1.78%
- Patients missed an average of 4.35 days of work
- MORE DATA NEEDED: fertility outcomes, safety
High-intensity focused ultrasound ablation
# Procedural differences

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Hospital Time</th>
<th>Return to Work</th>
<th>Complications</th>
<th>Future Fertility?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myomectomy (open)</td>
<td>1-2days</td>
<td>4-6 weeks</td>
<td>↑ infection, ↑EBL, ↑scarring</td>
<td>Yes</td>
</tr>
<tr>
<td>Myomectomy (MIS)</td>
<td>&lt;1 day</td>
<td>2 weeks</td>
<td>↑operative time, ↓EBL, ↓infection</td>
<td>Yes</td>
</tr>
<tr>
<td>UAE</td>
<td>1-2days</td>
<td>1 week</td>
<td>Fever, nausea, pain, malaise, vaginal discharge, ovarian damage</td>
<td>Minimal data</td>
</tr>
<tr>
<td>Acessa / lap RFA</td>
<td>&lt; 1 day</td>
<td>4-5 days</td>
<td>L/S complications, failure</td>
<td>No data</td>
</tr>
</tbody>
</table>
Conclusions
Recognize signs or symptoms of uterine fibroids

Identify appropriate medical treatments

Describe variety of procedural options including uterine-sparing choices
Thank you.

I'm sorry your uterus got evicted, but at least you are free to wear white whenever you want.
References


