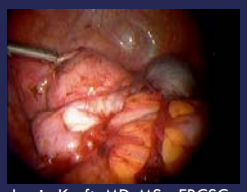
SURGICAL TREATMENT OF ENDOMETRIOSIS: HOW TO OPTIMIZE YOUR TREATMENT SUCCESS



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Objectives

At the end of this presentation, the participant will be able to:

- 1) Compare the pros and cons of excision vs ablation for surgical treatment of endometriosis (and learn some tips for carrying out both methods)
- 2) Identify when ovarian cystectomy is indicated for treatment of endometriomas and be able to perform them in a more fertility preserving and hemostatic manner
- 3) Compare and utilize post-operative medical treatment options to prolong a patient's pain-free interval

Endometriosis

- Presence of endometrial glands and stroma outside the uterus
- Prevalence ~ 11% but up to 87% in women with CPP
- Indications for surgical management:
  - Fail or decline medical management
  - Need for diagnosis
  - Exclude malignancy in an adnexal mass
  - Treatment of infertility
- Tools used for surgical treatment:
  - Electrocautery
    - Monopolar: l-hook, scissors
  - Laser:
    - CO2
    - KTP
  - Sharp dissection

Ablation vs Excision

- Meta-analysis of 5 RCTs comparing laparoscopic excision/ablation to diagnostic laparoscopy found significant improvement in pain at 6-12 months (75% vs 32%)
- 2 RCT's comparing excision with ablation:
  - Wright et al 2005: 12 in each arm
  - Healey et al 2010: 89 in each arm
- No difference in pain at 6-12 months f/u
- Largely dependent on surgeon preference and skill

Ablation vs Excision

- Benefits of Excision:
  - Pathologic diagnosis
  - Removal of endometriosis that is close to a vital structure (ie ureter, vessel or bowel)
  - Removal of deep infiltrating endometriosis

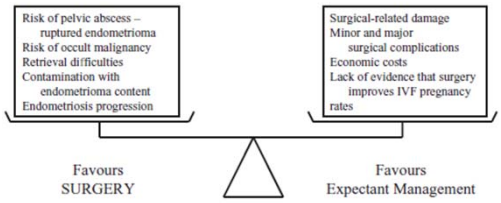
Excision

- Lesion should be evaluated for proximity to surrounding vital structures and depth
- Wide excision
- Hydrodissection can aid in separation
- Traction and counter traction

Management of Ovarian Endometriomas

- Considerations in deciding on surgical management:
  - Pain
  - Previous Endometriomas
  - Exclusion of Malignancy
  - Fertility

Management of Ovarian Endometriomas for Fertility



ESHRE Recommendations

- Recommend laparoscopic cystectomy prior to IVF for endometriomas ≥ 4cm in diameter to:
  - Confirm diagnosis histologically
  - Improve access to follicles
  - Possibly improve ovarian response

Ovarian cystectomy

- Optimal treatment approach
- Aspiration alone is ineffective with a recurrence rate of 88% at 6 months
- Cochrane Review of Excision vs Ablation of ovarian endometriomas showed lap excision:
  - Reduced recurrence (OR 0.41)
  - Reduced requirement for further surgery (OR 0.21)
  - Reduced recurrence of dysmenorrhea (OR 0.15), dyspareunia (OR 0.08) and nonmenstrual pelvic pain (OR 0.10)
  - Increased rate of spontaneous pregnancy in women with subfertility (OR 5.21)

Tips and Tricks for Performing Ovarian Cystectomy

- MOST IMPORTANTLY: Make sure you're in the right plane!!!
- No cyst is "too large to save the ovary"
- Traction and counter-traction close to the tissue you're manipulating
- Use blunt instruments on ovarian tissue
- Minimize thermal damage to normal ovarian tissue
- Microbipolar cautery

Post-operative medical treatment

- Since recurrence rate for pain is so high after conservative treatment, post-operative medical management is important to lengthen the pain-free interval
- Evidence from Cochrane Review 2004 on post-operative medical treatment demonstrates some reduction in pain by 12 months but no evidence of a benefit for pain beyond 12 months
- BUT…evidence from RCT's included in review that GnRH agonist use x 6 months post-op compared to no treatment or placebo, lengthens pain free interval post-op

ESHRE Guideline Recommendation

- "Treatment with danazol or a GnRH agonist for 6 months post-operatively reduces endometriosis-associated pain and delays recurrence at 12 and 24 months compared with placebo and expectant management"
- "Post-op treatment with a COC is not effective"
  - Level 1b Evidence
  - 2005

Cochrane Review of LNH-IUD post-operative management

- Reduction in recurrence of painful periods in the LNG-IUD group vs no post-op treatment
- No evidence of statistical difference in patient-reported pain scores between the LNG-IUD and GnRH agonist group

Post-operative Medical Management with GnRH Agonist

- Lupron 3.75mg IM monthly injections vs 11.25mg IM q 3monthly injections
- Recommend add-back treatment to limit side effects
- Suggested add-back regimens:
  - Estrace 1mg po OD + Micronor 2 days on, 2 days off (Casper regimen)
  - NETA 5mg po OD

Questions?

- Thank you!