

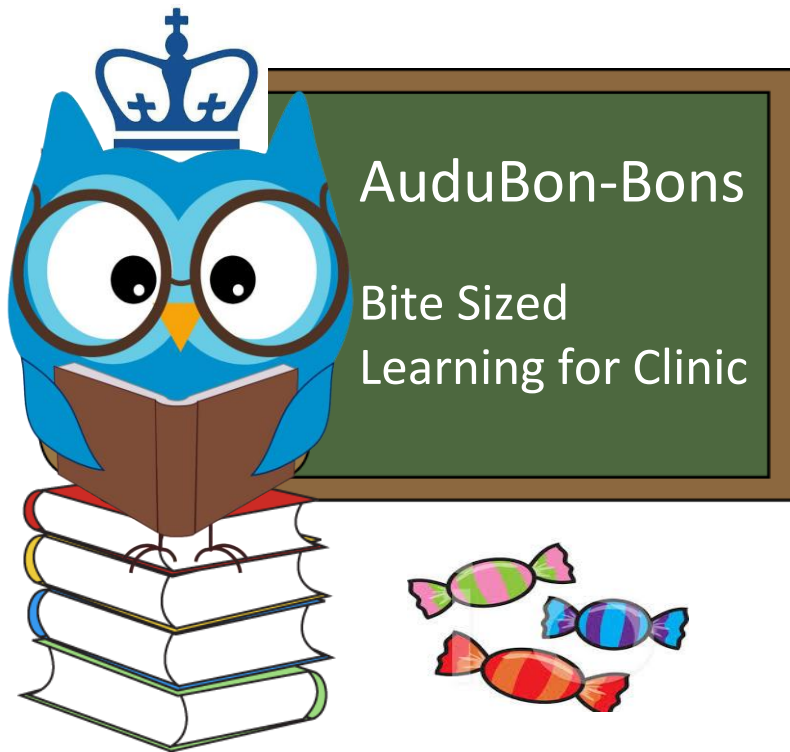
ENDOMETRIOSIS

Week 85

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Reading Assignment:

<https://www.obgproject.com/2016/10/18/evaluation-treatment-endometriosis/>



LEARNING OBJECTIVES



- To describe the pathophysiology of endometriosis and its symptoms
- To gain an understanding of the challenges associated with establishing a diagnosis of endometriosis
- To review the recommendations for medical and surgical management of endometriosis
- To learn how to utilize symptom improvement and the patient's desire for fertility to guide treatment decisions



CASE VIGNETTE

- A 24y G0 woman presents with complaint of worsening pain during her periods. She states she started having painful periods as she approached late adolescence.
- She states her pain is usually well-managed with ibuprofen, but has recently become less responsive to it. She got married a year ago, and is using condoms for contraception
- She has also occasionally noticed some pain during intercourse.



FOCUSED HISTORY

- **What will be pertinent in her history?**

- POB: G0

- PGYN: LMP 3 weeks ago

Menarche 15 y.o./Cycle length 28-30d/Duration 4-5d (2-3 pads/d)

Painful menses, usually not affecting ADL

No STIs; No known hx Cysts/Fibroids; No abnormal paps, last pap 2 years

ago

Sexually active with 1 male partner; Total lifetime partners – 3 (all male)

- PMH: Denies dysuria or dyschezia

- PSH: Denies

- Meds: Multivitamin

- All: Shellfish - hives

- Soc: Denies toxic habits; lives with her husband, feels safe at home

- FHx: No significant history; No history of gyn cancer



PERTINENT PHYSICAL EXAM FINDINGS

- **What will be pertinent in her physical exam?**

- P: 80 BP: 118/70 Wgt: 92kg Hgt: 160cm BMI: 25

- Abd: soft, NT/ND

- Pelvic: Vulva: Normal external female genitalia; No lesions

Vagina: Healthy-appearing mucosa, No nodularity in CDS

Cervix: Nulliparous os; L/C/P; **no CMT**

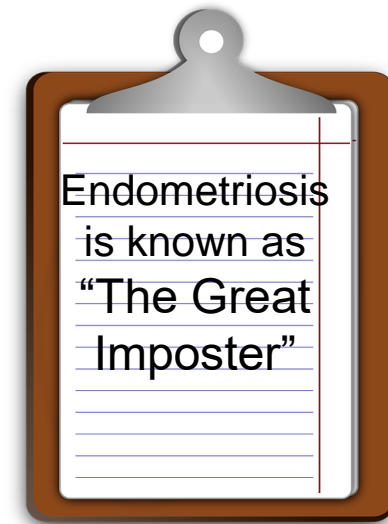
Uterus: **NT, Mobile**, ~8wk size, anteverted

Adnexae: **No mass/tenderness b/l**



DIFFERENTIAL DIAGNOSIS

- **What is your differential diagnosis?**
 - Endometriosis
 - Pelvic infection/PID
 - Inflammatory bowel disease
 - Musculoskeletal disease
 - Interstitial cystitis
 - Psychological etiology
 - Other disorders
 - Vascular, Neurologic, Thyroid, Autoimmune

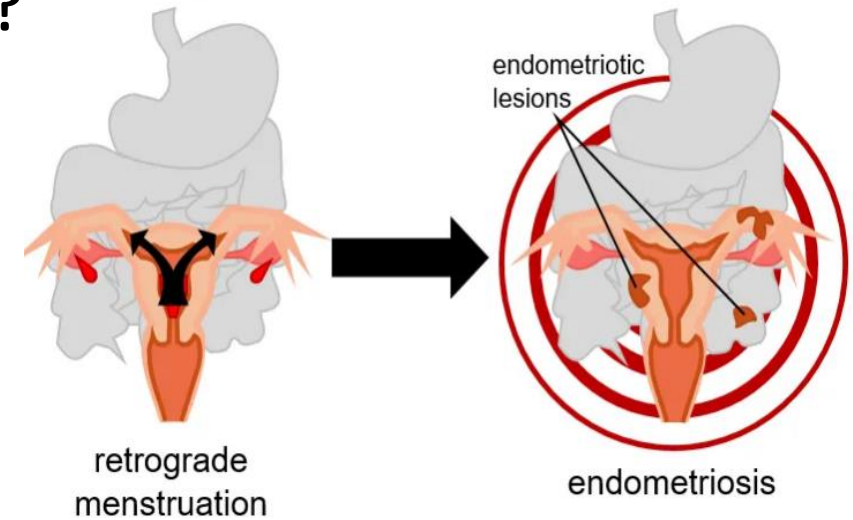


Because of symptom overlap with other disorders, diagnosis can be delayed 4-10 years!



PATHOPHYSIOLOGY

- What is the pathophysiology of endometriosis?
 - Retrograde menstruation
 - Other theories
 - Lymphatic & hematogenous spread
 - Coelomic metaplasia
 - Pre-menarcheal/adolescent patients



Lesions lead to increased proinflammatory cytokines

P

High expression of nerve growth factor in lesions

A

Nerve fiber entrapment within implants

I

N



COMMON FEATURES

- What are the most commonly reported manifestations of endometriosis?
 - Chronic pelvic pain
 - Dysmenorrhea
 - Dyspareunia
 - Infertility

- What are common sites of endometriotic implants?
 - Peritoneal
 - Ovarian
 - Deep



DIAGNOSIS

- How is endometriosis diagnosed?

- Definitive diagnosis

- Histology of surgically removed lesions
- Classification of Stage per ASRM
 - Uniform record of intra-op findings
 - Poor correlation to symptoms or fertility

Endometrial
glands

Endometrial stroma

Hemosiderin-laden
macrophages


- Presumptive (Clinical) – Sufficient to initiate low-risk therapy

- Exclude other causes
- Thorough H&P
 - Fixed uterus, uterosacral nodularity
 - Physical exam may be normal
- +/- TVUS
 - Ovarian endometrioma

Response to treatment
SHOULD NOT be utilized as a
metric for diagnostic
confirmation/exclusion

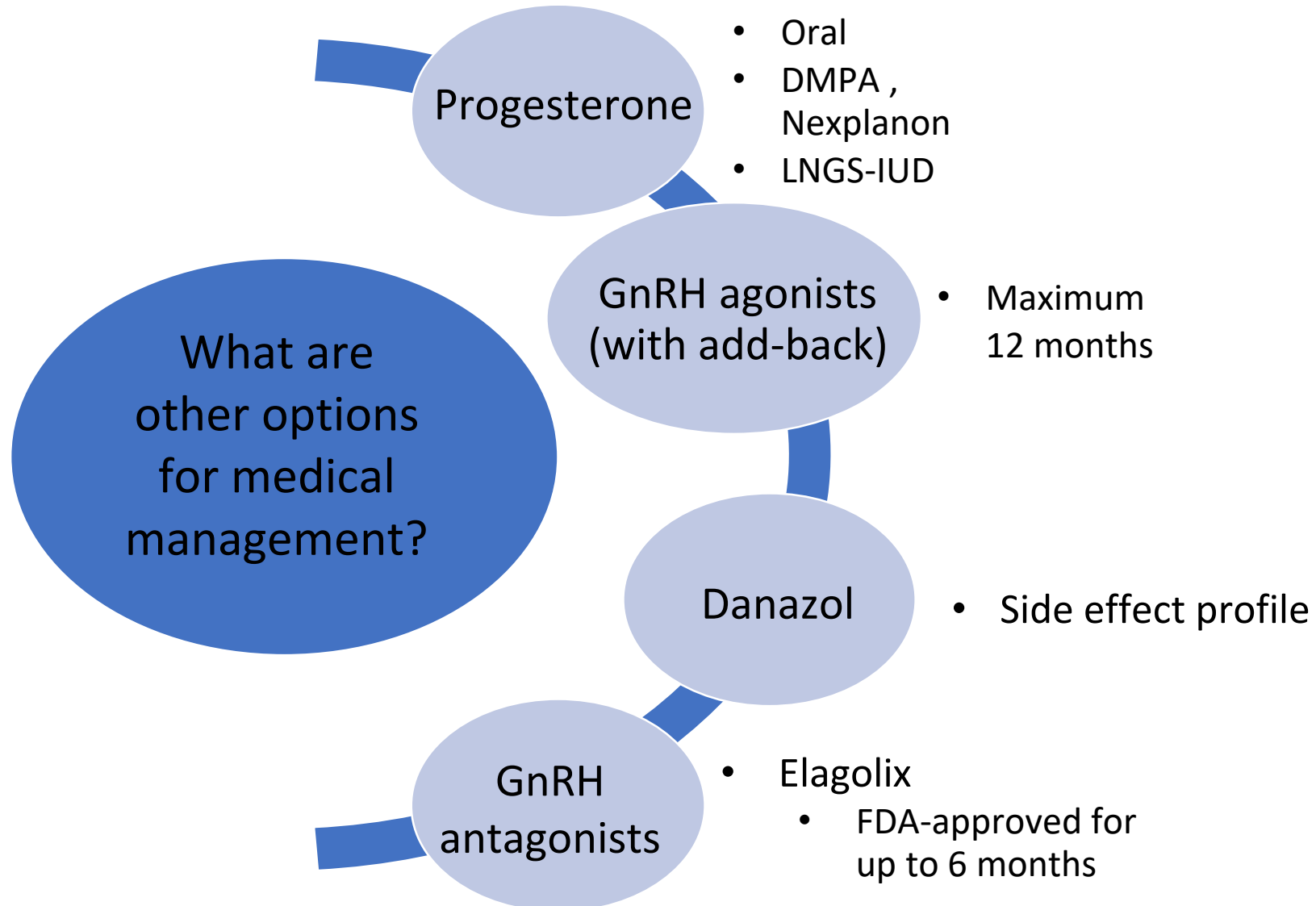


MEDICAL MANAGEMENT

- **What are the goals when planning this patient's management?**
 - Reduction of symptoms
 - Preservation of fertility
 - Target actions:
 - Estrogen suppression
 - Inhibition of tissue proliferation/inflammation
- **What would be the first line treatment for this patient?**
- NSAIDs + COC/Transdermal/Vaginal
 - Stop proliferation of glands, loss of secretory features overtime 
atrophy of glands and stroma and decidual reaction
 - Consider continuous COCs if unresponsive to cyclic



MEDICAL MANAGEMENT



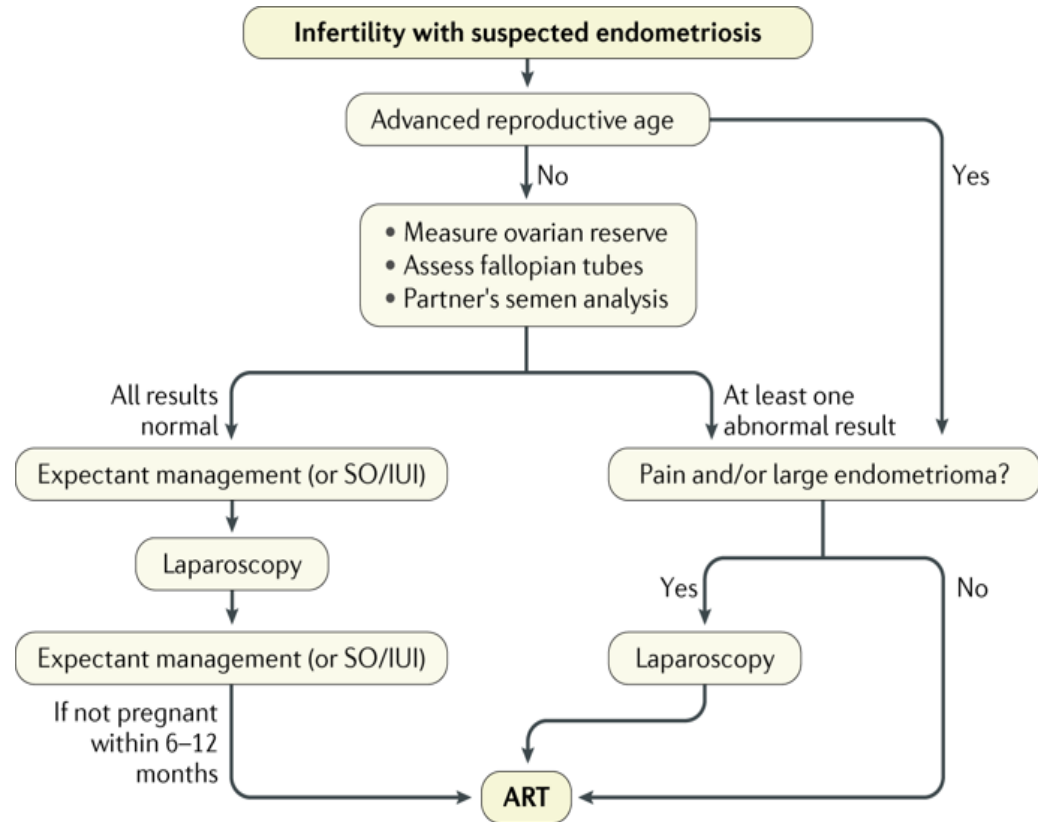
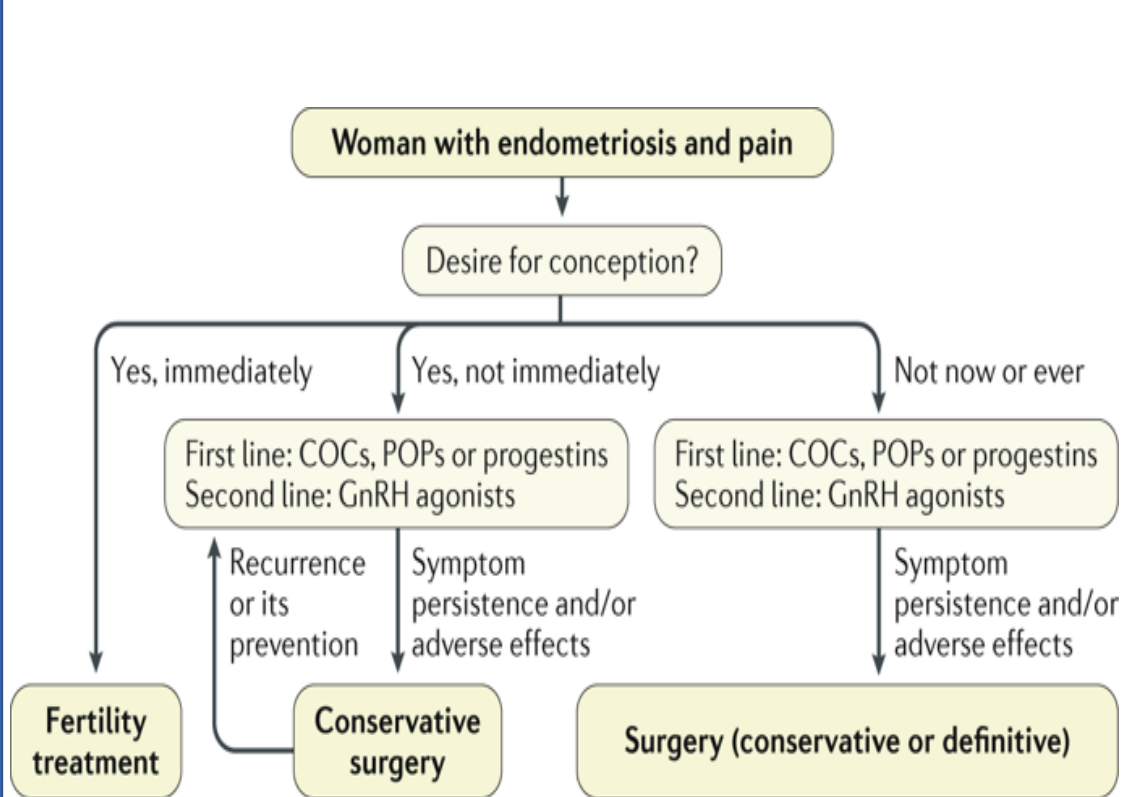
SURGICAL MANAGEMENT

- What are key points to consider regarding surgical management of endometriosis?
- Gold standard for diagnosis
 - Laparoscopy
- Conservative surgery
 - Excision/Ablation
 - Endometrioma removal (>5cm)
 - Improved pregnancy rates v. Ovarian damage
 - Pre-sacral neurectomy (midline pain)
 - Disadvantages
 - Higher rate of recurrence and reoperation compared to definitive surgery
- Definitive surgery
 - Hysterectomy - BSO



MANAGEMENT DECISIONS

- How do you apply response to treatment and your patient's desire for fertility toward shared decision making for management?



SOCIAL DETERMINANTS OF HEALTH

Endometriosis care disparities between public and private health insurance

- Medical service use
 - 3 times LOWER in public sector when compared to private sector
- Laparoscopy
 - Women in the public sector were 3.5 times LESS likely to undergo laparoscopy
- Controlled substance
 - Women in the public sector were 2.7 times MORE likely to be prescribed opioid/narcotics
- Ob/Gyn services
 - Used > 2-fold LESS in the public sector (29.5% v. 70.5%)



Epic .phrase

.BBonEndoTreatmentCounseling

Description: Endometriosis treatment and counseling

The patient was informed of the suspected diagnosis of endometriosis. She was counseled that while her symptoms could be the result of many etiological factors, her history, physical exam, and initial testing have lowered the suspicion for other causes. It was explained that the goal of therapy will be a reduction of symptoms.

We discussed treatment options and will begin with NSAIDs and combined OCPs. The patient was also counseled that other options would include progesterone only options, as well as GnRH agonists

Fertility

***As the patient desires fertility in the near future, she was also given referral to REI for further management.

***As the patient does not desire future fertility, she was counseled that if symptoms persist or medical management is not well-tolerated, the plan will be to explore surgical options (conservative and definitive).



CODING/BILLING

Diagnosis	ICD-10
Endometriosis	N80
Other	N80.8
Uterus	N.80.0
Ovary	N80.1
Fallopian tube	N80.2
Pelvic peritoneum	N80.3
RV septum and vagina	N80.4
Intestine	N80.5
In cutaneous scar	N80.6
Unspecified	N80.9



EVIDENCE

References

- Management of endometriosis. Practice Bulletin No. 114. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2010; 116:223–36.
- Fourquet F, Zavala DE, Missmer S, et al. Disparities in healthcare services in women with endometriosis with public vs private health insurance. *Am J Obstet Gynecol* 2019;221:623.e1-11
- Nezhat, C., Vang, N., Tanaka, P.P. and Nezhat, C., 2019. Optimal management of endometriosis and pain. *Obstetrics & Gynecology*, 134(4), pp.834-839.
- Practice Committee of the American Society for Reproductive Medicine, 2014. Treatment of pelvic pain associated with endometriosis: a committee opinion. *Fertility and sterility*, 101(4), pp.927-935.
- Practice Committee of the American Society for Reproductive Medicine, 2012. Endometriosis and infertility: a committee opinion. *Fertility and sterility*, 98(3), pp.591-598.
- Dunselman, G.A.J., Vermeulen, N., Becker, C., Calhaz-Jorge, C., D'Hooghe, T., De Bie, B., Heikinheimo, O., Horne, A.W., Kiesel, L., Nap, A. and Prentice, A., 2014. ESHRE guideline: management of women with endometriosis. *Human reproduction*, 29(3), pp.400-412.
- Giudice, L.C. and Kao, L.C., 2004. Endometriosis *Lancet*. 2004; 364: 1789–99. *CrossRef| PubMed| Web of Science® Times Cited*, 1364.
- Zondervan, K.T., Becker, C.M., Koga, K., Missmer, S.A., Taylor, R.N. and Viganò, P., 2018. Endometriosis (Primer). *Nature Reviews: Disease Primers*.

