



Endometriosis

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No disclosures



Objectives

Describe the pathophysiology of endometriosis

Identify common signs and symptoms

List diseases in the differential diagnosis of endometriosis

Outline treatment options

Pathogenesis

- Not well understood
- No consistent test confirms the diagnosis
- CA-125 may be elevated
- Several dominant theories exist to explain endometriosis spread

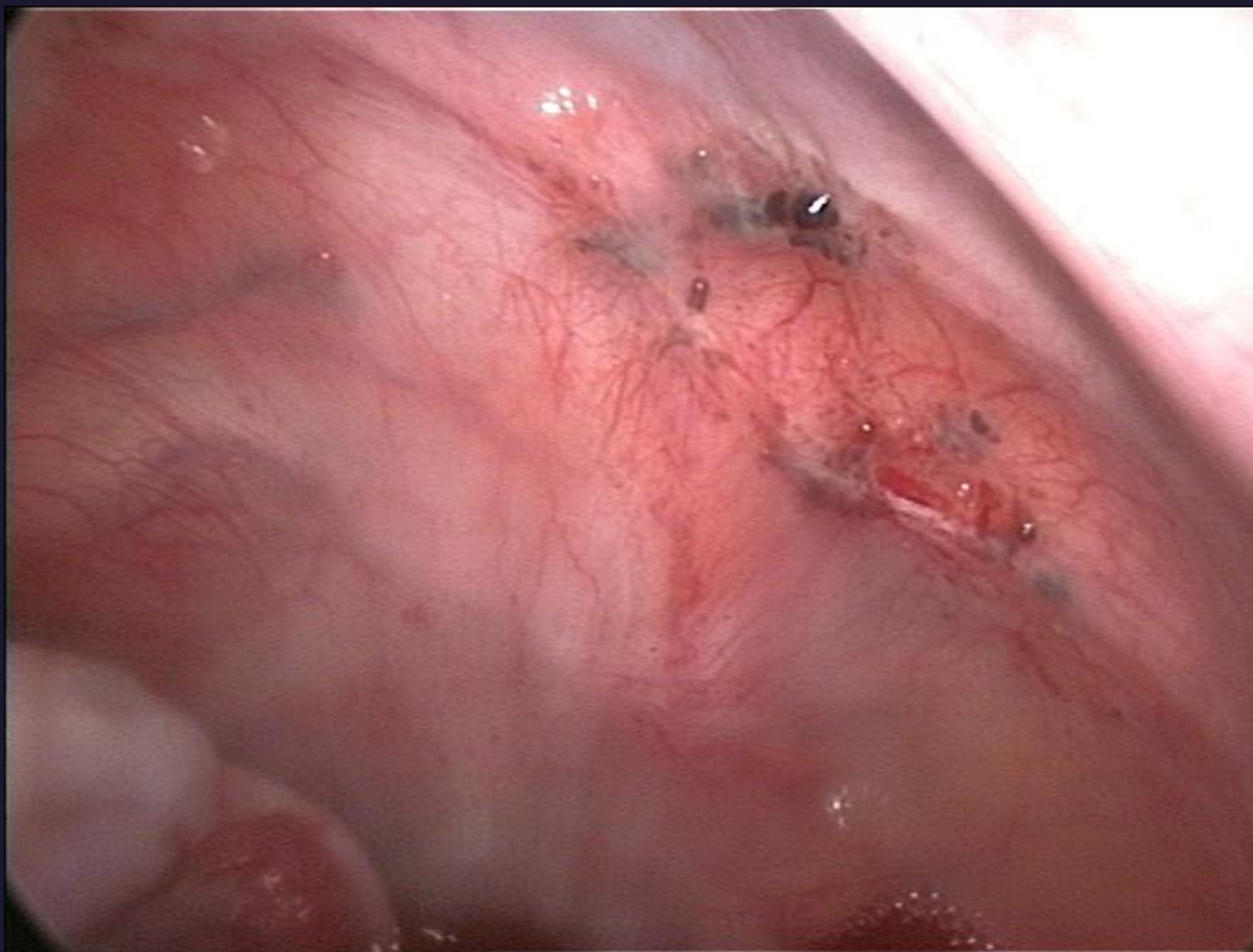


Pathogenesis of Endometriosis

- Retrograde menstruation
 - Implants tend to be in the most dependent areas of the pelvis
 - Patients with history of outflow tract obstruction have higher rates
 - Imperforate hymen, transverse vaginal septum, cervical aplasia
- Metaplasia
 - Theory that transformation can happen from the peritoneal mesothelium
- Lymphatic
 - 20% of patients with the disease have evidence of endometriosis in pelvic lymphatics
 - Can explain distance occurrence of endometriosis in the umbilicus, Bartholin's gland, and catamenial hemothorax



Endometriosis implants



[Wikimedia](#)

Signs and symptoms

- Dysmenorrhea
- Dysuria
- Deep dyspareunia
- Dyschezia
- Infertility
- Chronic pelvic pain



Dysmenorrhea

Primary dysmenorrhea

- Begins with first menses or within a few months of menarche

Secondary dysmenorrhea

- Evolves over time
- Caused by acquired conditions

Primary Dysmenorrhea

- Uterine cramping comes from the release of prostaglandins
- Cox 2 inhibitors block production of prostaglandins providing effective pain relief
- High dose NSAIDS are primary treatment
- Oral contraceptives decrease menstrual flow reducing pain
- Osteopathic manipulation relieves pelvic and back pain
 - Treat on the first day of menses for three months for prolonged relief

Secondary dysmenorrhea associated with endometriosis

- Progressive in nature
- May improve spontaneously with pregnancy or treatment that suppresses the menstrual cycle
- Endometrial implants within the peritoneum bleed with menses
- Blood causes extreme inflammation within the pelvis
- Inflammation is toxic to both sperm and ova
- Familial tendency – ask about family history of mother and sisters

Differential Diagnoses

- Chronic pelvic inflammatory disease
- Adenomyosis
- Hemorrhagic corpus luteum
- Benign or malignant ovarian neoplasm
- Ectopic pregnancy
- GI or urologic disorders



Associated Symptoms: Chronic Pelvic Pain

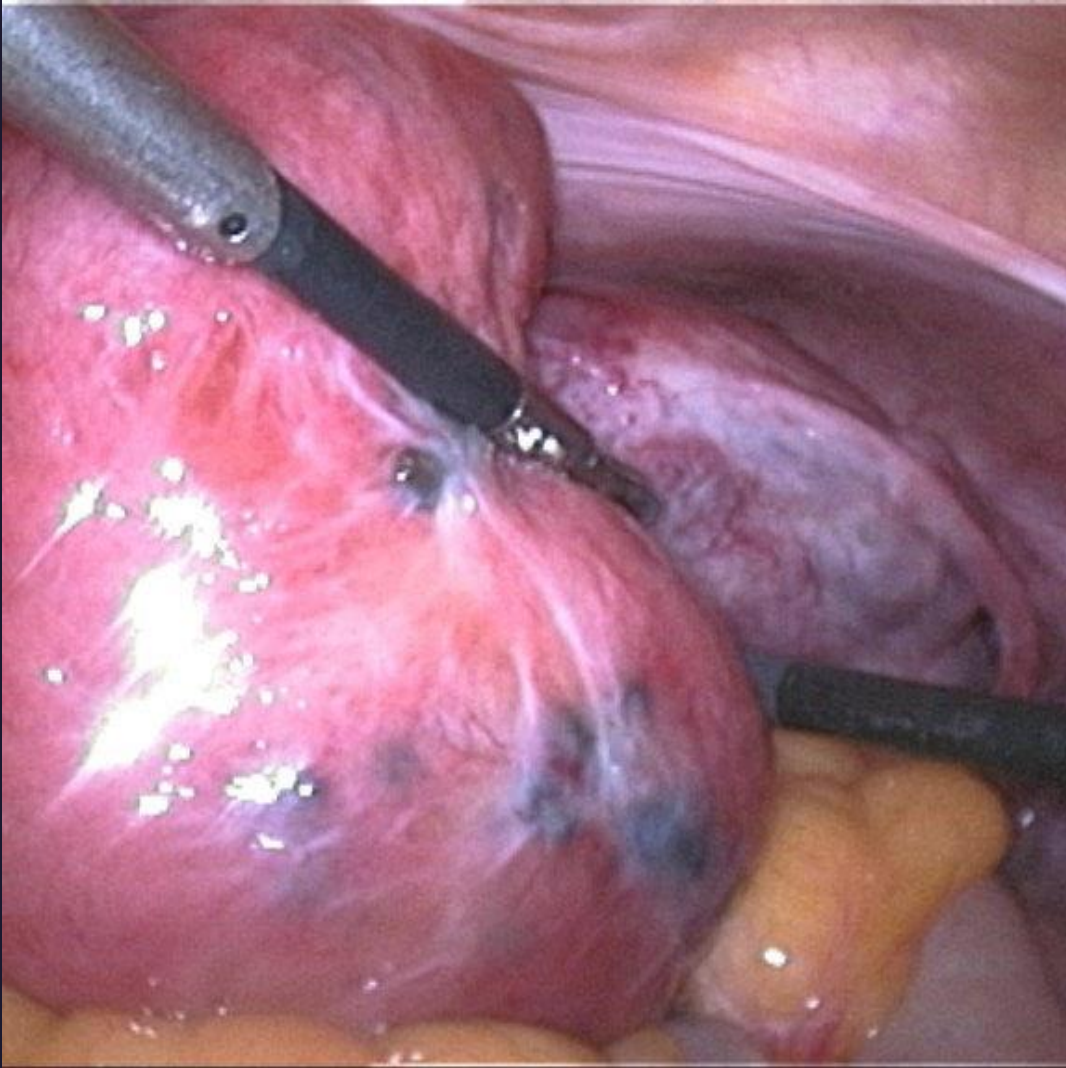
- Gynecologic
 - Bleeding, dysmenorrhea, discharge
- Gastrointestinal
 - Bloating, flatulence, bowel changes
- Urologic
 - Dysuria, frequency, urgency, incontinence
 - “Evil Twins” – Endometriosis with interstitial cystitis
- Neurologic pain follows nerve pattern



[Creative Commons: Hunner's ulcer](#)

Adenomyosis - Endometriosis interna

- Inflammatory process of the uterus
- Causes global enlargement and softening
- Contributes to pelvic pain, infertility, dysmenorrhea and menorrhagia
- Glands and stroma are often proliferative



Public Domain

Treatment Options

Combination Hormonal contraception

Depo Medroxyprogesterone

Levonorgestrel intrauterine device

GnRH agonist – Lupron

GnRH antagonist – Elagolix

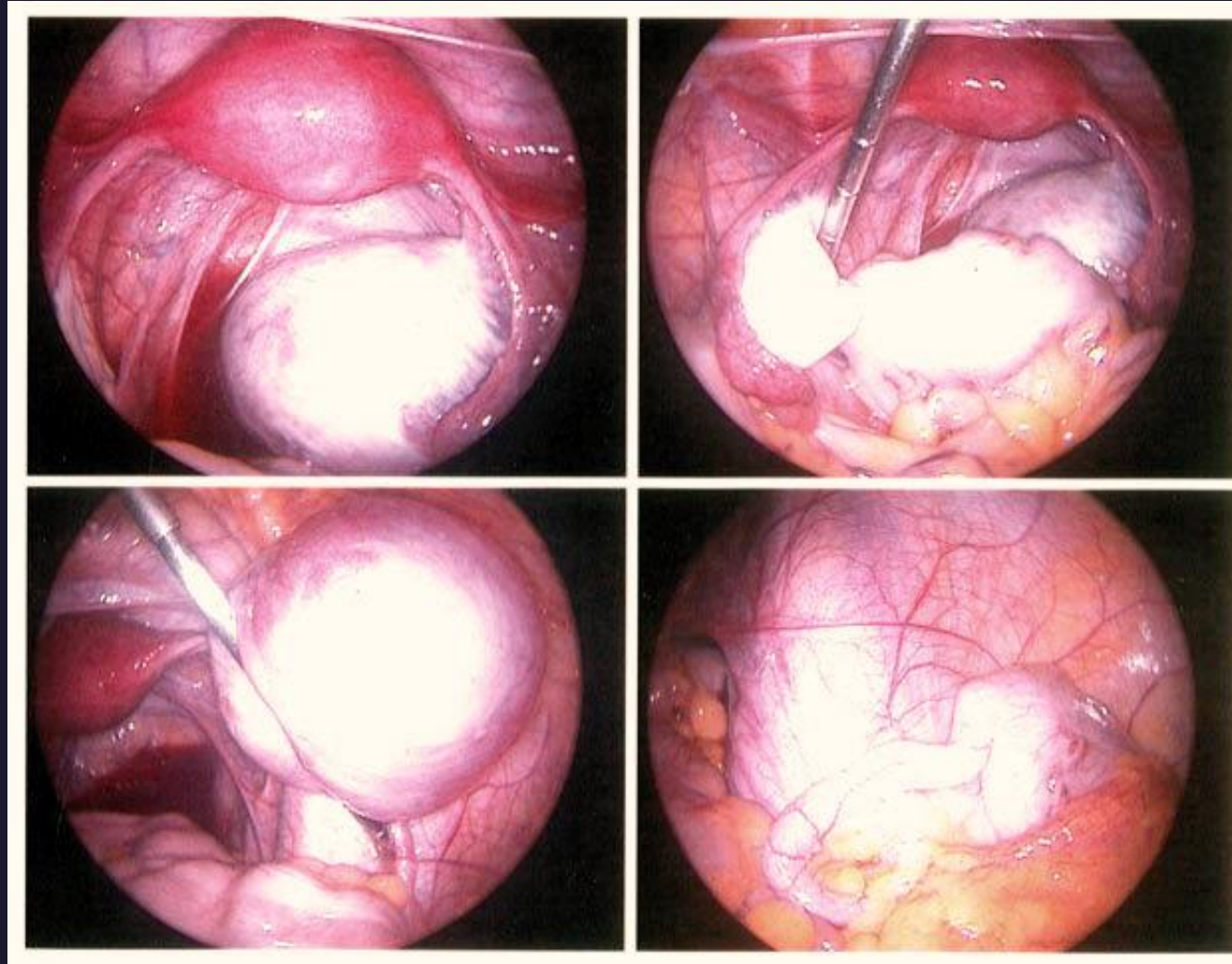
Surgical

Contraceptives

- Relieve symptoms and slow progression of disease
- Long-acting reversible contraception (LARC)
 - Levonorgestrel IUD
- Oral contraceptives
- Patch and ring
 - Patient preference



Endometriosis as seen on laparoscopy

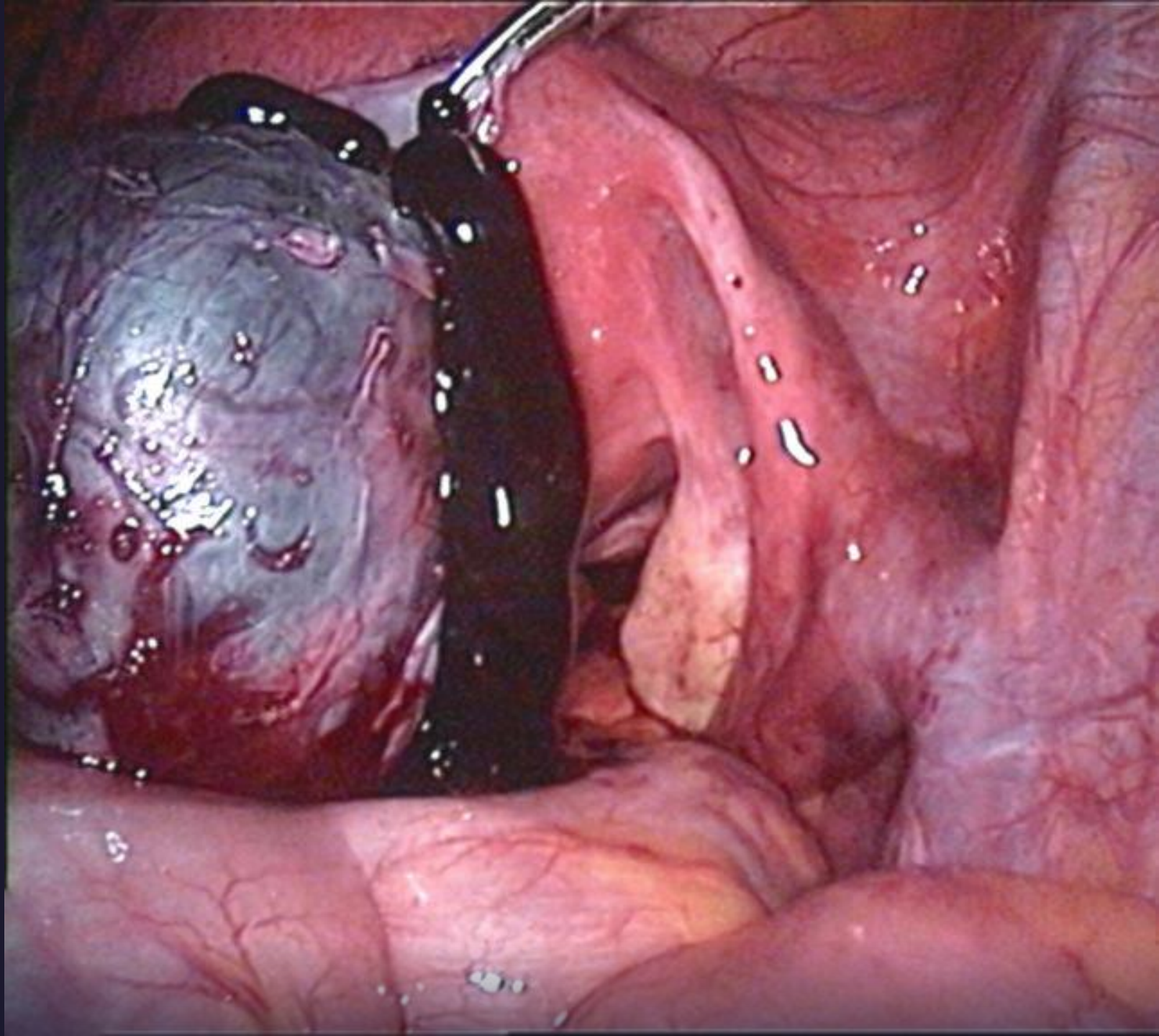


[Endometriosis.jpg \(624×486\) \(wikimedia.org\)](#)

GnRH Agonist

- GnRH is normally released in a pulsatile fashion from the hypothalamus
- GnRH agonist given as an IM depot injection will cause menstrual cycle shut down and create temporary menopausal symptoms
- Treat up to 6 months for improvement of endometriosis symptoms
- Treats areas that cannot be surgically ablated
 - Lesions on the bowel
- Bone density loss can be problematic

Chocolate
cyst of the
ovary

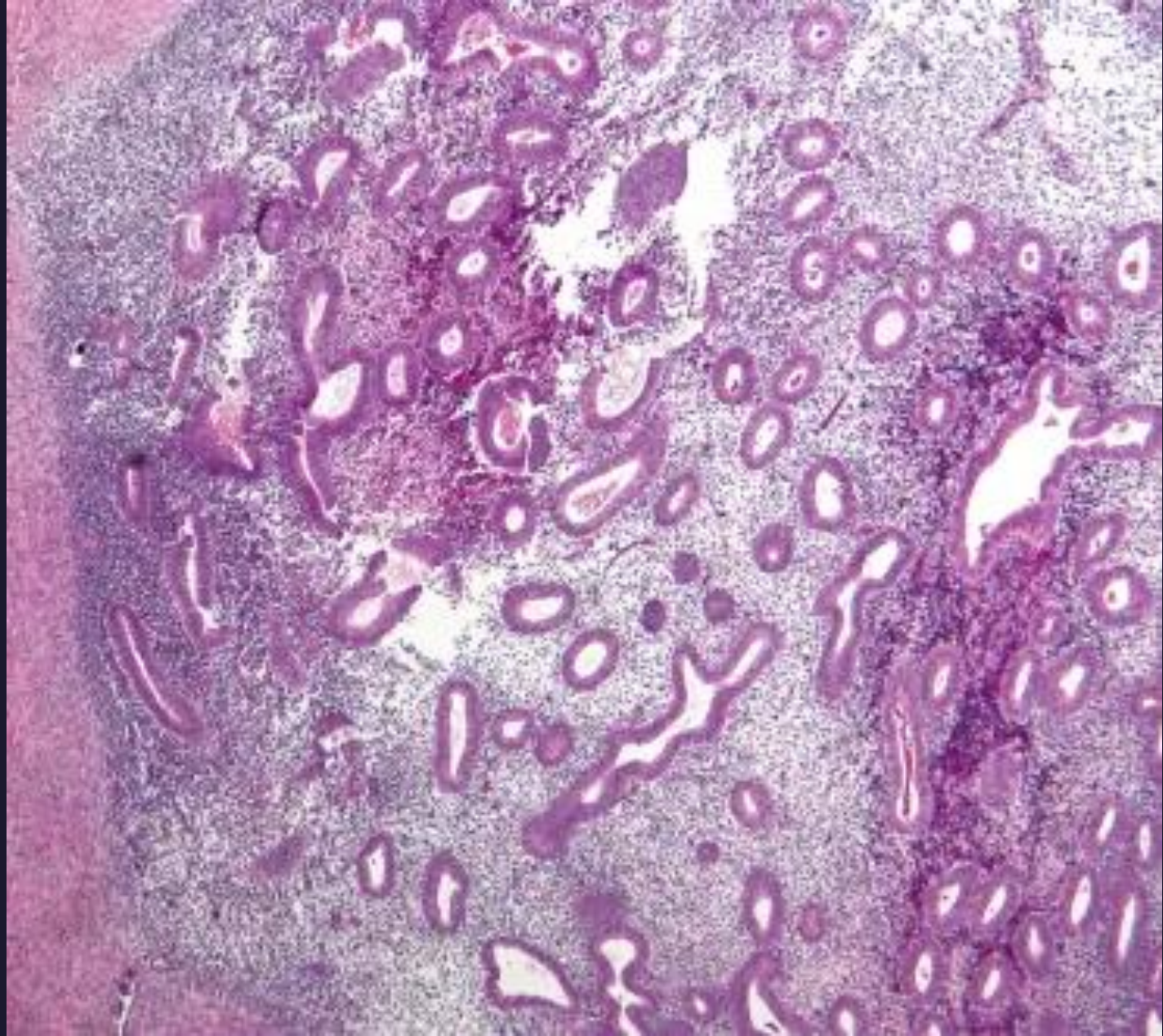


GnRH receptor antagonist

- Daily oral administration of Elagolix
- Improvement noted soon after initiating with baseline after 1-2 months
- Binds competitively to GnRH receptors in the pituitary gland
- Dose-dependent suppression of LH and FSH
- Menopausal symptoms are possible but more tolerable than with the GnRH agonist
- Bone density less problematic and rebounds after discontinuation

Excision/ablation

- Diagnostic Laparoscopy is appropriate for any patient with chronic pelvic pain or infertility
- Ablation used for superficial implants
- Some implants are very deep and should be excised
- Adhesions are common
- Improved fertility after laparoscopy
- Colectomy may be required with significant bowel involvement



Nephron. Endometriosis of the ovary.jpg. 2010 Jun 5. Wiki Commons. Creative Commons Attribution Share-Alike 3.0 Unported license.

Support your patients

- Incidence is 5-10% of the female population, but diagnosis is often delayed
- Support groups, websites and blogs are available
- Make sure to investigate chronic pelvic pain or infertility patients for endometriosis
- Look for endometriosis if a history of uterine outflow obstruction
- Familial tendency – ask about symptoms in close relatives.



Support *your* patients

Support groups, websites and blogs are available

Investigate patients with chronic pelvic pain, infertility or history of outflow track obstruction

Familial tendency – ask about symptoms in close relatives

Encourage fertility early in the reproductive years

Thanks for your participation!

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