Extragenital Endometriosis

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Thank You
Objectives

- Introduce concept of extragenital endometriosis
- Review relevant pathophysiology and anatomy of extragenital endometriosis
- Learn surgical principles related to treatment of extensive extragenital endometriosis
Extragenital Endometriosis

- Occurs in 1-12% of patients with endometriosis
- It can occur in the absence of visible pelvic disease
- Endometriosis has been reported in almost all body structures

Extragenital Endometriosis

- Most common sites
  - GI tract
  - Urinary tract

- Remote sites:
  - Lungs
  - Skin
  - Nervous system
  - Retinal
  - Adrenal gland
Symptoms

- Pain
- Bleeding
- Organ dysfunction
- Diverse and puzzling resulting from functioning endometrial tissue or scarring in the affected site

Relation to the menstrual cycle offers a clue to the diagnosis
Common sites of bowel involvement

– Rectosigmoid (51%)
– Appendix (15%)
– Small bowel (14%)
– Rectum (14%)
– Cecum and colon (5%)

Multiorgan Endometriosis
Bowel Endometriosis

Treatment Based on Location of Endometriosis in the Bowel

- Small Bowel Resection
- Cecectomy or Disc Excision
- Disc Excision or Segmental Resection
- Appendectomy
- Shaving or Disc Excision

Urinary Tract Endometriosis

- Presents in about 20% of women with endometriosis
- Symptoms include frequency, urgency, dysuria, and hematuria

Bladder Endometriosis

• Most common site of genitourinary tract endo
• Pathological confirmation is crucial – 1 out of 15 cases of deeply infiltrating bladder endo was adenosarcoma


Endometriosis of Bladder

Shaving Technique
Bladder Endometriosis

- Within the bladder, endometriotic lesions are generally found in the trigone, dorsal wall, or at the ureterovesical junction
Segmental Bladder Resection
GU

• Endo of genitourinary tract is common, however, it causes compression and obstruction in <1%

• Ureteral endometriosis is rare < 0.3% of all endometriotic lesions

• Predominantly unilateral, with left ureter affected more commonly than the right


Laparoscopic Treatment of Ureteral Endometriosis

- Ureterolysis
- Vaporization and excision of endometriosis
- Ureterotomy or segmental ureteral resection
- Retrograde internal ureteral stent
- One layer repair (4-o Polydioxanone)
- Postoperative ureterogram

Ureter Endometriosis
Robotic Assisted Uterolysis
GU

• Ureteroneocystotomy with a psoas bladder hitch must be carried out when the deep infiltrating lesions are extensive or invade the ureteric wall.
Ureteroureterostomy
Renal Endometriosis

- Involvement of the kidney has been infrequently reported.
- Diagnosis has been made with
  - IVP
  - CT scan
  - MRI
- In the absence of a biopsy, there is no accurate pre-op method to exclude malignancy.
  - Majority of patients are treated with nephrectomy.
- There has been no report of regression of renal endometriosis with GnRH agonist therapy

Thoracic Endometriosis Syndrome (TES)

- Rare disorder characterized by the presence of functional endometrial tissue in the pleura, the lung parenchyma, and the airways.
Thoracic Endometriosis

- 4 Main Clinical Entities
  - Catamenial pneumothorax (CP)
  - Catamenial hemothorax (CHt)
  - Catamenial hemoptysis (CH)
  - Lung nodules
Clinical Entities of TES

• Catamenial pneumothorax is the most frequent presentation of TES

• Occurring in approx 80% of the cases

Clinical Entities of TES

- Catamenial hemothorax 14%
- Catamenial hemoptysis 5%
- Least common are endometriotic lung nodules
Diagnosing TES

• Diagnostic tests that help rule out malignancy, infection, and other pathologies
  – Chest radiograph
  – CT
  – MRI
  – Thoracentesis
  – Bronchoscopy

• However, limited diagnostic yield for TES
  – Variable and inconsistent findings
Video-assisted thoracoscopic surgery

- At present gold standard for both definitive diagnosis and surgical treatment of catamenial pneumothorax
Thoracic Endometriosis
Lesions of TES

• Diaphragmatic abnormalities 38.8%
• Endometriosis of visceral pleura 29.6%
• Bullae, blebs, and scarring 23.1%

Endometriosis of the Diaphragm

- The abdominal diaphragm can be involved with endometriosis
- Diagnosis and treatment is possible with videolaparoscopy
Diaphragm Endometriosis

I. Repair of diaphragmatic defect in a patient with catamenial pneumothorax
Liver Endometriosis

- Extremely rare entity
- Difficult to diagnose
- First described in 1986 by Finkel et al
Endometriosis of Liver: Treatment

- 15 cases reported in the literature were treated by laparotomy
- Report of 2 cases treated laparoscopically

Other Extrapelvic Sites

• Cutaneous
  ▪ Abdominal wall

• Nervous System
  ▪ Nerves in or near pelvis
  ▪ Sciatic Nerve
  ▪ Obturator Nerve
Other Extrapelvic Sites

- Pancreatic endometriosis has been reported in 2 patients
- One patient with isolated omental endometriosis
- Vaginal endometriosis
- Cervical endometriosis
- Vulvar, perineal, and perianal

6th annual seminar on Minimally Invasive Gynecologic Surgery with hands-on workshop on laparoscopic suturing and knot-tying

December 11-12, 2014
The Roosevelt Hotel, New York City, NY
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