
بسم الله الرحمن الرحیم

IBS CME Isfahan

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Session 3 Differentials

Who is Who ?

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Scenario 6

Question 6: Endometriosis

- 6-1 When to think of endometriosis
- 6-2 How to screen endometriosis
- 6-3 Routine clinical pathway

6-1 When to think of endometriosis

- Endometriosis is defined as “an estrogen-dependent inflammatory disease characterized by the presence of endometrium-like tissue in sites outside the uterine cavity, primarily on the pelvic peritoneum and ovaries
- Symptoms :dysmenorrhea, pelvic pain unrelated to the menstrual cycle and dyspareunia; subfertility

PATHOGENESIS

- **Genetic**
- **Immunologic**
- **Epigenic change**
- **no generally** accepted thesis regarding the origin of endometriosis
- **Sampson's theory** of retrograde menstruation is the most well -accepted theory

6-1 three primary mechanisms

- The direct and indirect effects of **focal bleeding** from endometriotic implants.
- The actions of **inflammatory cytokines** in the peritoneal cavity.
- Irritation or direct **infiltration** of **nerves** in the pelvis.

- **Common symptoms:**
- chronic abdominal/pelvic pain and/or pressure
- severe dysmenorrhea
- dyspareunia
- heavy menstrual bleeding
- Infertility
- Pelvic pain is typically chronic and described as dull, throbbing, sharp, and/or burning.
- Symptoms can occur alone or in combination; an increased number of symptoms has been associated with increased likelihood of endometriosis.
- Additional endometriosis symptoms include bowel and bladder dysfunction (eg, pain, urgency, frequency), abnormal uterine bleeding, low back pain, and chronic fatigue.
- Individuals with endometriosis can be asymptomatic. Such individuals are often diagnosed at the time of surgery for another indication.

Gete DG, Doust J, Mortlock S, et al. Associations between endometriosis and common symptoms: Findings from the Australian Longitudinal Study on Women's Health. Am J Obstet Gynecol 2023.

symptoms

- **Proximal (deep) dyspareunia** – Deeply infiltrating endometriosis lesions can occur on the uterosacral and cardinal ligaments, pouch of Douglas, posterior vaginal fornix, and anterior rectal wall and contribute to deep sexual pain
- **Distal (superficial) dyspareunia** – Distal (ie, introital or superficial) dyspareunia can result from lesions of the cervix, hymen, perineum, and episiotomy scars
- Women with bowel endometriosis can present with diarrhea, constipation, dyschezia, and bowel cramping.
- Patients with deeply infiltrating endometriosis implants of the posterior cul-de-sac and rectovaginal septum typically present with dyspareunia and painful defecation. Rectal bleeding may occur but is rare.

Li J, Shi Y, Zhou C, Lin J. Diagnosis and treatment of perineal endometriosis: review of 17 cases. Arch Gynecol Obstet 2015; 292:1295

DIAGNOSIS

- **Gold standard**: surgical diagnosis of endometriosis
- presumptive clinical diagnosis based on symptoms, physical examination, and imaging has gained favor, especially for starting low-risk and low-cost interventions such as hormonal contraceptives or progestins, as presumptive diagnosis is less invasive, lower risk, and reduces treatment delay
- clinicians and patients should discuss the potential risks, benefits, costs, and availability of each diagnostic option.
- The approach is determined by patient preferences.

Agarwal SK, Chapron C, Giudice LC, et al. Clinical diagnosis of endometriosis: a call to action. Am J Obstet Gynecol 2019; 220:354.e1

Definitive surgical diagnosis

- Evaluation of severe pain or other symptoms that limit function
- Persistent pelvic pain that does not respond to medical therapy
- Treatment of anatomic abnormalities, such as symptomatic ovarian cysts, rectovaginal nodules, or bladder or rectal lesions.

6-2 How to screen endometriosis

- pelvic examination and imaging techniques are conventional to be used, in place of surgical methods, to diagnose suspected endometriosis.
- confirmation of the endometriosis diagnosis and included laparoscopy.
- MicroRNA (miRNA) analysis shows promise as a noninvasive diagnostic test for endometriosis. While an initial study reported test sensitivity and specificity of > 95 percent, this finding needs to be replicated in additional studies.

Bendifallah S, Suisse S, Puchar A, et al. Salivary MicroRNA Signature for Diagnosis of Endometriosis. J Clin Med 2022; 11

6-3 Routine clinical pathway

- mild to moderate symptoms; who desire a trial of low-risk medications, including nonsteroidal anti-inflammatory drugs, acetaminophen/paracetamol, and hormonal contraception (estrogen-progestin contraceptives and progestins); and who prefer to avoid surgery.
- severe symptoms, those who have not responded adequately to the low-risk therapies above, and those who value definitive confirmation of the disease.
- One advantage of surgery is that endometriosis can be treated at the same time as diagnosis.

Scenario 7

Question 7: PMS

- 7-1 PMS-IBS overlap: Diagnosis
- 7-2 PMS management: Routine pathway

Digestive Diseases

Functional Gastrointestinal Diseases: Research Article

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Menstrual Status Is Associated with the Prevalence of Irritable Bowel Syndrome in a Japanese Young Population: A Cross-Sectional Study

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7-1 PMS-IBS overlap: Diagnosis

- Mechanism of the relationship between dysmenorrhea and IBS remains unclear.
- Female sex hormones : induce changes in gastric motility
- sex hormones : affect visceral nociception in women
- Women with IBS have also shown a tendency to have more severe menstrual symptoms
- Dysmenorrhea might induce IBS by triggering changes in sex hormone levels that delay gastrointestinal motility and induce dysregulation of the pain pathways.

Fukudo S, Okumura T, Inamori M, Okuyama Y, Kanazawa M, Kamiya T, et al. Evidencebased clinical practice guidelines for irritable bowel syndrome 2020.

- **DIAGNOSTIC CRITERIA**
- **DSM-5 criteria** — One or more of the following symptoms must be present:
- ●Mood swings, sudden sadness, increased sensitivity to rejection
- ●Anger, irritability
- ●Sense of hopelessness, depressed mood, self-critical thoughts
- ●Tension, anxiety, feeling on edge
- One or more of the following symptoms must be present to reach a total of five symptoms overall:
- ●Difficulty concentrating
- ●Change in appetite, food cravings, overeating
- ●Diminished interest in usual activities
- ●Easy fatigability, decreased energy
- ●Feeling overwhelmed or out of control
- ●Breast tenderness, bloating, weight gain, or joint/muscles aches
- ●Sleeping too much or not sleeping enough

7-2 PMS management: Routine pathway

- **MILD SYMPTOMS: Exercise and relaxation techniques**
- **MODERATE TO SEVERE SYMPTOMS:**
- **Women who do not desire contraception: Selective serotonin reuptake inhibitors**
- **Women who desire contraception: Combined estrogen-progestin contraception**

Scenario 8

Question 8 Pelvic mass

- 8-1 When/How to screen

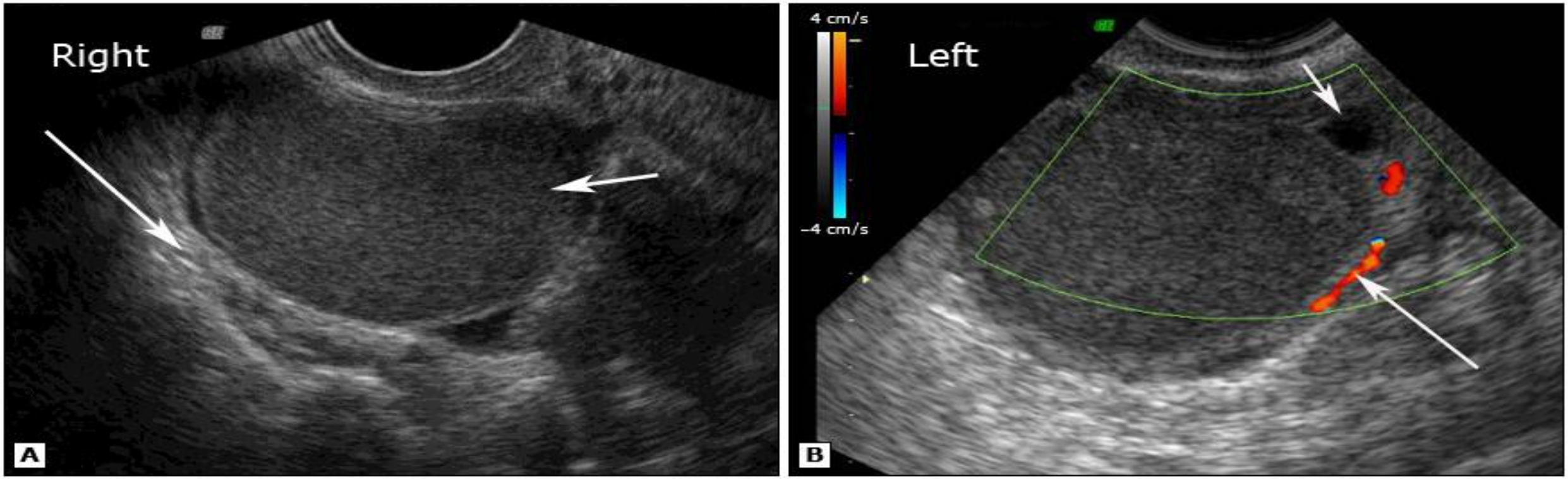
8-1 When/How to screen pelvic mass

- Endometriomas can be asymptomatic or cause symptoms of pain, dyspareunia, and/or mass effect.
- Endometriomas causing bothersome symptoms that interfere with routine function are removed for symptom relief
- **Baseline evaluation**:
- Assessment of symptoms, Pelvic imaging(typically with transvaginal ultrasound), Assessment of the risk of malignancy, Evaluation of the patient's ovarian reserve, Planning for future fertility.

8-1 When/How to screen pelvic mass

- Imaging studies are performed to confirm a likely endometrioma, exclude findings suggestive of malignancy, and assess for change over time.
- While definitive diagnosis of an endometrioma requires histologic evaluation of a surgical specimen, imaging findings have high sensitivity and specificity for detecting an endometrioma.

Endometrioma



(A) Transvaginal ultrasound image of the right adnexa showing an endometrioma. The homogeneous echo pattern of the cyst contents (ie, "ground-glass" appearance) is characteristic of an endometrioma (short arrow); the cystic nature of the endometrioma is also indicated by the post-cyst enhancement (long arrow).

(B) Transvaginal ultrasound with color Doppler image of the left adnexa showing a benign endometrioma of the left ovary viewed with color Doppler imaging. No flow within the cyst can be demonstrated; however, blood flow is demonstrated within the wall of the cyst in the ovarian tissue itself (long arrow). Also identified within the left ovary is a small follicle (short arrow).

Scenario 9

Question 9 Post-surgical

- 8-1 When/how to think of incomplete obstruction
- 8-1 When/How to think laparotomy-related syndromes
- 8-2 Diagnostic laparoscopy indications

8-1 When/how to think of incomplete obstruction

8-1 When/How to think laparotomy-related syndromes

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8-2 Diagnostic laparoscopy indications