433 Teams OBSTETRICS & GYNECOLOGY

endometriosis

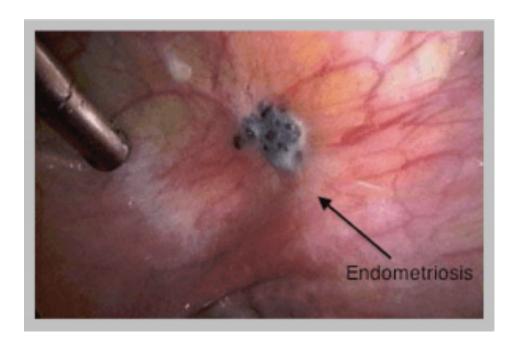




what is endometriosis?

The presence of endometrial gland outside the uterus.

- 1- Endometriosis affect 7-10% of female in their productive age.
- 2- The prevalence of endometriosis in infertile women is 38%.
- 3-71-87% of women with chronic pelvic pain have endometriosis.



Pathogenesis: there are 3 theories 'important':

1-retrograde flow 'samson theory':

-during menstruation some women have a retrograde flow of blood to flubbing tube and to ovaries.

this may lead implant of endometrial gland outside the uterus. like: pelvis, peritoneum and ovaries.

2- vascular- lymphatic dissemination:

-endometrial cells travel through vessels and lymph to distal places like: kidney, plural cavity,

3- coelmic metaplasia:

-multipotent cells in peritoneal cavity that start to function. this theory explain the presence of endometriosis in adolescence

*Endometriosis can cause inflammatory reaction which lead to the formation of (adhesion + scaring).

Sites of endometriosis

common site:

Ovaries, posterior cul de sac (consist of the following: uterosacral ligament and rectovaginal septum) Round ligament, fallopian tube.

less common sites:

brain, lung, upper urter, sites of surgical scars.

symptoms:

- -Some extensive endometriosis have minimal symptoms.
- -Some minimal endometriosis have **sever** symptoms.
- dysmenorrhea, dyspareunia, dyschezia, hematochezia.

physical examination:

Sometimes there is no signs why? Because either small or not clear.

but we may see:

- 1- fixed non-mobil uterus.
- 2- ovarian endometriosis (chocolate cyst) tender but not palpable.
- 3-uterosacral nodularity 'classic sign'

How it looks like?

- 1- clear white lesions
- 2- powder burn lesions
- 3- dark \ red blue domes

endomatrial stroma

hemosiderinladen macrophages.

Diagnosis

It is made in Operation room.

direct visualization of tissue. then take tissue biopsy 'we should see 2 out of 4 in the biopsy' endometrial gland

endometrial epithelium

Management

1- first line therapy: oral contraceptive. easy to use and inhibit functional endometriosis.

medical therapy:

2- progesterone therapy. implants, oral or injection, inhibit GnRh which suppress endomatreosis.

- 3- GnRh agonist: down regulate pituitary gland. can cause menopause like symptoms. It can be use for a long term in young patients.
- 4-Danazole: suppress LH\FSH .menopause like symptoms. it have androgenic properties. so women will have hairstism and breast atrophy.

management: focus on 3 things

1- decrease pelvic pain.

2-decreases surgical intervention.

3- preserve fertility.

surgical therapy:

conservative

- 1- exciton.
- 2- cauterisation or ablation of vestal endomateriosis.
- 3- laysis of adhesion

extirpative

- 1- hysterectomy
- 2- bilateral salpingo-oopherctomy

Case discussion

A 28-year-old woman G0P0 woman is seen because of the inability to conceive for the past two years. She has never used oral contraceptives and she and her husband have not used any form of birth control for over two years. Her menarche occurred at the age of 12 and her menses became very painful in her late teens. She has had chronic cyclical pelvic pain, which has progressively worsened over the years. This pain is incapacitating at times. She describes the location of the pain to be in the lower abdomen and pelvis that radiates into the lower back. In addition to the pain, her menstrual periods have become increasingly frequent and heavy. She experiences deep dyspareunia that began with her first sexual partner and has continued with her husband. She denies any non-cyclical vaginal bleeding, discharge and weight loss. She states that her 22-year-old younger sister has always had very painful menses.

On physical examination the patient looks her age. She is 138 lbs and is 5'6". Her BP is 110/76 mm Hg with a heart rate of 85 bpm. Her head and neck examination is negative. Cardiac and respiratory systems are also normal. Examination of the abdomen reveals that it is flat with no scars. On palpation she has generalized tenderness of the lower abdomen. There are no signs suggesting evidence of a surgical abdomen and she has no costo-vertebral angle tenderness. The pelvic exam showed a fixed, retroverted uterus. The uterosacral ligaments on both sides are nodular. A 5 cm right ad- nexal mass is palpated and tender.

Transvaginal ultrasound of the pelvis showed a 5.5 cm cystic mass with low-level echoes in the right ovary. The left ovary was reported as normal. The uterus is retroverted and is of normal size and contour. There is no evidence of fibroids and the endometrial lining is normal.

What symptoms does this patient present with that would lead to a suspicion of endometriosis?

Infertility

Dysmenorrhea

Cyclic lower abdominal and pelvic pain

Back pain

Dyspareunia

Possible family history

Key Learning Point: Endometriosis can manifest in many ways. Patients may have no symptoms to signifi- cant symptoms and sequelae.

Describe the physical findings for this patient that helps confirm a possible diagnosis of endometriosis?

Tender nodular uterosacral ligaments on pelvic and rectovaginal exam

Fixed, retroflexed uterus

Ovarian mass

Key Learning Point: Endometriosis can manifest in many ways. Patients may present from the range of no physical findings to fixed locked non-mobile pelvic structures. The most common sites of endometriosis are the ovaries, uterine ligaments, and recto and vesicovaginal septae.

After discussing the possibility of endometriosis, the patient asks, "How did I get this disease?" How do you answer the patient?

Attachment and implantation of endometrial glands and stroma to peritoneal tissue from retrograde men- strual flow
Hematogenous and lymphatic spread
Stem cells from bone marrow
Coelomic metaplasia

Key Learning Point: Retrograde menstrual flow is the most likely pathogenesis of endometriosis.

What alternative diagnoses would you consider in this patient?

Chronic pelvic pain-consider chronic pelvic inflammatory disease, adhesions, gastrointestinal conditions, interstitial cystitis.

Dysmenorrhea-consider causes of primary and secondary dysmenorrhea

Dyspareunia-consider chronic pelvic inflammatory disease, or ovarian cysts.

Key Learning Point: Many conditions both gynecologic and non-gynecologic can present similar to endome- triosis with the reverse also being true.

How is the diagnosis of endometriosis made?

History and physical exam are first steps due to variety of presentations

Direct visualization is needed for establishing a diagnosis

Tissue biopsy makes definitive diagnosis

Pelvic sonogram cannot make diagnosis, but can exclude other conditions.

Key Learning Point: Endometriosis is a tissue diagnosis that requires a biopsy. A presumptive diagnosis is made based on history and physical examination.

What protocols are used to stage endometriosis?

The revised American Fertility Society's (AFS) staging system is generally used to stage endometriosis in the infertile patient. In the AFS system, points are assigned for size and depth of implants and for the se- verity of adhesions in various locations. Stages I through IV are assigned on the basis of points. Manage- ment of endometriosis can be guided by the stage of disease and the desire for fertility.

The American Society of Reproductive Medicine (ASRM) protocol correlates fertility potential with a quantified stage of disease. The staging includes the color of lesions, the percentage of surface involved and a detailed description of endometriomas.

Key Learning Point: Systematic protocols are used in staging the severity of endometriosis.

What are the treatment options for a patient with a diagnosis of endometriosis?

Depends on presenting symptoms and severity, location and severity, desire for future childbearing, age, and possible gastrointestinal or urinary tract involvement Expectant management may be considered for patients with minimal symptoms and disease and/or pa- tients who are trying to conceive

Medical therapy includes NSAID's, combined estrogen and progestin contraceptives, progestins alone, danazol (17-alpha ethinyl testosterone derivative), and gonadotropin-releasing hormone (GnRH)

Surgical management ranges from conservative options such as removal of endometriomas and destruc- tion of endometriotic implants to definitive approaches such as hysterectomy with bilateral salpingoopho- rectomy

Key Learning Point: The management of endometriosis is dependent on a number of factors including wish for fertility preservation, symptom severity, and the location of endometriosis.



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