

PREVENTIVE WOMEN'S HEALTH
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ENDOMETRIOSIS

Endometriosis was first reported in 1926. To date, the exact underlying cause is still not known. Endometriosis is a very common condition in the general female population. The disease involves the uterine lining (endometrium). The uterus (womb) is mostly a muscular organ the size of an inverted pear with a slim inner lining (endometrium). The endometrium is the layer that is shed each month with the menstrual period and then regrows. The muscle layer contractions are the cause of menstrual cramps and labor contractions.

In endometriosis, the endometrium gets outside of the uterus and implants on pelvic tissues such as the back of the uterus, ovaries, intestines (bowels) and pelvic floor. This tissue will now grow and bleed each month like the normal endometrium.

In the pelvis this endometrium acts as 'glue' leading to cysts on the ovaries and pelvic adhesions (scar tissue) between the uterus, tubes, ovaries and intestines. These cysts and adhesions lead to symptoms of painful menstrual periods, heavy bleeding, painful intercourse and infertility (unable to get pregnant).

Symptoms of Endometriosis

- 1) Asymptomatic- no symptoms. Found during surgery for other reasons
- 2) Painful periods (dysmenorrhea)
- 3) Painful intercourse (dysparunia)
- 4) Pelvic pain
- 5) Heavy/irregular menstrual periods
- 6) Infertility
- 7) Bowel problems- constipation, painful bowel movements
- 8) Family History- Other family members have endometriosis

Making the Diagnosis

Although the patient's medical history (symptoms) are suggestive, the **only** way to make a diagnosis is to visualize the disease during an outpatient surgical procedure called Laparoscopy. The lesions of endometriosis are small black powder burn spots which can not be felt on pelvic exam or seen with an ultrasound machine.

At laparoscopy the disease is diagnosed and treated at the same time by vaporizing the black lesions with electrocautery, cutting adhesions and draining ovarian cysts.

Adenomyosis

This is a type of endometriosis where the endometrium is implanted in the uterine muscle leading to heavy painful periods. Usually a hysterectomy is needed as other therapies are not helpful (hormone therapy, D&C).

Pathophysiology

It is felt that the patient's own estrogen from her ovaries is playing some role in causing endometriosis. Treatment in young women involves 'turning off' her ovarian estrogen production. This can usually be done with medicine such as birth control pills or hormone therapy. More extensive disease such as large ovarian cysts, extensive pelvic adhesions or bowel adhesions will not respond to medical therapy and surgery will be necessary.

Treatment of Endometriosis

Like any other disease, endometriosis can be treated by medicine or surgery. This depends on the patient's age, fertility wishes, extent of symptoms and extent of anatomic disease at laparoscopy. Initial surgery is done at time of diagnostic laparoscopy- cauterization of powder burn lesions, draining ovarian cysts and cutting adhesions. For severe disease, more extensive 'cut open-laparotomy' surgery may be needed with possible removal of the ovaries and a hysterectomy if indicated.

A) Medical Therapy

- 1) BCP-birth control pills- ovarian estrogen suppression
- 2) Depo-provera injections every 3 months- ovarian estrogen suppression
- 3) Lupron- monthly injection- turns off the ovaries
 - creates a reversible medical menopause- no estrogen-hot flushes

B) Surgical Therapy

- 1) Laparoscopy- cauterization endometriosis implants, cut adhesions
- 2) Laparotomy- cut adhesions, remove ovaries, hysterectomy

Follow-up

Endometriosis is a life long illness as long as the patient has her uterus and ovaries producing estrogen. Disease progression is highly variable in each patient and despite medical and surgical therapy can progress leading to worsening symptoms, compromised fertility and eventually hysterectomy. The disease is believed to be 'cured' once the uterus and ovaries have been removed, although a small number of disease recurrences have been reported in the medical literature.