Endometriosis

Overview

Endometriosis is a common health problem in women. It is a painful disorder in which tissue that normally lines the inside of the uterus (endometrium) grows outside the uterus. The organs and structures endometriosis is found on are the ovaries, fallopian tubes, tissues that hold the uterus in place, outer surface of the uterus and the lining of the pelvic cavity. In endometriosis, displaced tissue continues to act as it normally would meaning that it will thicken, break down and bleed with each menstrual cycle. The trapped endometrial tissue on ovaries may cause cysts to form. The surrounding tissue can become irritated, eventually developing scar tissue and adhesions. Endometriosis can cause pain that may be severe especially during the menstrual cycle. Fertility problems may develop but effective treatments are available.

Symptoms

The primary symptom is pelvic pain associated with the menstrual cycle. The pain is more significant than typical pain related to the menstrual cycle and becomes progressively worse with time. Common signs and symptoms of endometriosis include:

• Painful menstrual cycle (dysmenorrhea). Pelvic pain may begin before and extend several days into the cycle and may include low back and abdominal pain.
• Pain with intercourse.
• Pain with bowel movements or urination. This symptom is usually limited to the time during the menstrual cycle.
• Excessive bleeding. Occasional heavy periods (menorrhagia) or bleeding between periods (menometrorrhagia).
• Infertility.
• Other symptoms experienced during the menstrual cycle include fatigue, diarrhea, constipation, bloating or nausea.

Causes

The exact cause of endometriosis is unknown. There are several explanations including:

• Retrograde menstruation. In retrograde menstruation, menstrual blood that contains endometrial cells flows back through the fallopian tubes and into the pelvic cavity instead of out the body. The cells stick to the pelvic walls and surfaces of pelvic organs and continue to grow, thicken, and bleed over the course of each menstrual cycle. This is the most likely explanation for endometriosis.
• Coelomic metaplasia. The linings of the pelvic organs possess embryonic cells that are able to grow into other forms of tissue such as endometrial cells.
• Surgical scar implantation. After a surgery, such as a hysterectomy or cesarean section, endometrial cells may attach to the surgical incision.
• Endometrial cell transport. The blood vessels or lymphatic fluid may transport endometrial cells to other parts of the body.

• Immune system disorder. A problem with the immune system may make the body unable to recognize and destroy endometrial tissue that’s growing outside the uterus.

**Risk Factors**

Women in their reproductive years are most likely to develop endometriosis. More than five million women in the U.S. have endometriosis. It is most common in women 25 to 40 but has been reported in girls as young as eleven. Women might be more likely to get endometriosis if they have:

- Never had children
- Menstrual periods lasting longer than 7 days
- Short menstrual cycles (less than 27 days)
- A family member with endometriosis
- A health problem that prevents normal passage of menstrual blood flow
- History of pelvic infection
- Damage to cells in the pelvis from an infection

There is no definitive way to lower the chances of getting endometriosis. However, lowering the hormone estrogen may help to decrease symptoms. To keep estrogen low a woman should exercise regularly, maintain a healthy weight and avoid large amounts of alcohol and caffeinated drinks.

**Complications**

The most common complication is impaired fertility. Approximately half of the women with endometriosis have difficulty getting pregnant. Endometriosis may obstruct the fallopian tube and keep the egg and sperm from uniting. Endometriosis could cause damage to the egg or sperm. Many women with mild to moderate endometriosis can still conceive and carry a pregnancy to term. Doctors may advise women with endometriosis to not delay getting pregnant because the condition gets worse over time.

Ovarian cancer does occur at higher than expected rates in women with endometriosis. The risk is still low of developing cancer.

**Treatments**

There is no cure but treatments for endometriosis include medications or surgery. A doctor may recommend over-the-counter pain relievers. Hormone therapies are sometimes effective in reducing pain.

Hormonal therapies include:

- Hormonal contraceptives including birth control pills, patches and vaginal rings.
- GnRH agonists and antagonists. This blocks the production of ovarian-stimulating hormone, lowering estrogen levels and preventing menstruation.
- Progestins. This a shot that is effective in halting menstruation and the growth of endometrial cells.

- Danazol. This drug also blocks the production of ovarian-stimulating hormones but may not be the first choice due to side effects.

- Surgery is a good option for women with severe endometriosis or women having difficulty getting pregnant.

**Fertility Treatments**

Surgery to remove as much endometriosis as possible while preserving the uterus and ovaries may increase the chances of getting pregnant. The surgery can be performed laparoscopically or through traditional abdominal surgery with more extensive cases. Assisted reproductive technologies, such as in vitro fertilization can help women become pregnant.

**References**

- [www.mayoclinic.com](http://www.mayoclinic.com)
- [www.medicinenet.com](http://www.medicinenet.com)
- [www.womenshealth.gov](http://www.womenshealth.gov)

**Other News:**

**If you have any suggestions for newsletter topics, please contact Dean Susan Hanrahan at hanrahan@astate.edu.**

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