

Med Pulse

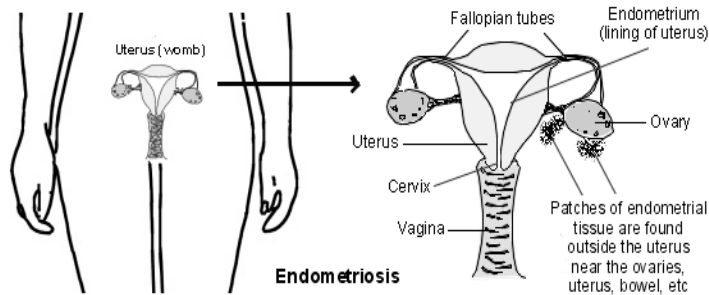


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ENDOMETRIOSIS

Endometriosis is a female health disorder that occurs when cells from the lining of the womb uterus grow in other areas of the body. This can lead to pain, irregular bleeding, and infertility.



Causes

If endometrial cells implant and grow outside the uterus, endometriosis results. The growths are called endometrial tissue implants. Women with endometriosis typically have tissue implants on the ovaries, bowel, rectum, bladder, and on the lining of the pelvic area. They can occur in other areas of the body, too.

Unlike the endometrial cells found in the uterus, the tissue implants outside the uterus stay in place when you get your period. They sometimes bleed a little bit. They grow again when you get your next period. This ongoing process leads to pain and other symptoms of endometriosis.



The cause of endometriosis is unknown. One theory is that the endometrial cells that shed when you get your period may travel backwards through the fallopian tubes into the pelvis, where they implant and grow. This is called retrograde menstruation. Sometimes, it may run in the family. Although endometriosis is typically diagnosed between ages 25 - 35, the condition probably begins about the time that regular menstruation begins.

A woman who has a mother or sister with endometriosis is much more likely to develop endometriosis than other women.

You are more likely to develop endometriosis if you:

- Started your period at a young age
- Never had children
- Have frequent periods or they last 7 or more days
- Closed hymen, which blocks the flow of menstrual blood during the period
- Damage to cells in the pelvis from an infection
- A family member (mother, aunt, sister) with endometriosis

Symptoms



Pain is the main symptom of endometriosis. A woman with endometriosis may have:

- Painful periods
- Pain in the lower abdomen before and during menstruation
- Cramps for a week or two before menstruation and during menstruation; cramps may be steady and range from dull to severe)
- Pain during or following sexual intercourse
- Pain with bowel movements
- Pelvic or low back pain that may occur at any time during the menstrual cycle

There may be no symptoms. Some women with a large number of tissue implants in their pelvis have no pain at all, while some women with milder disease have severe pain.

Why does endometriosis cause pain and health problems?



Growths of endometriosis are benign (not cancerous). But they still can cause many problems. Every month, hormones cause the lining of a woman's uterus to build up with tissue and blood vessels. If a woman does not get pregnant, the uterus sheds this tissue and blood. It comes out of the body through the vagina as her menstrual period.

Patches of endometriosis also respond to the hormones produced during the menstrual cycle. With the passage of time, the growths of endometriosis may expand by adding extra tissue and blood. The symptoms of endometriosis often get worse.

Tissue and blood that is shed into the body can cause inflammation, scar tissue, and pain. As endometrial tissue grows, it can cover or grow into the ovaries and block the fallopian tubes. Trapped blood in the ovaries can form cysts, or closed sacs. It also can cause inflammation and cause the body to form scar tissue and adhesions. This scar tissue may cause pelvic pain and make it hard for women to get pregnant. The growths can also cause problems in the intestines and bladder.

O/E

The health care provider will perform a physical exam, including a pelvic exam. Tests that are done to help diagnose endometriosis include:

- Pelvic exam
- Transvaginal ultrasound
- Pelvic laparoscopy

Treatment

There is no cure for endometriosis, but there are many treatments for the pain and infertility that it causes.

Hormone treatment - When pain medicine is not enough, doctors often recommend hormone medicines to treat endometriosis. Only women who do not wish to become pregnant can use these drugs. Hormone treatment is best for women with small growths who do not have bad pain. Hormones come in many forms including pills, shots, and nasal sprays. Common hormones used for endometriosis include:

- **Birth control pills** to decrease the amount of menstrual flow and prevent overgrowth of tissue

that lines the uterus. Most birth control pills contain two hormones, estrogen and progesterin. Once a woman stops taking them, she can get pregnant again. Stopping these pills will cause the symptoms of endometriosis to return.

- **GnRH agonists and antagonists** (nafarelin acetate (Synarel) and Depo Lupron) greatly reduce the amount of estrogen in a woman's body, which stops the menstrual cycle. These drugs should not be used alone because they can cause side effects similar to those during menopause, such as hot flashes, bone loss, and vaginal dryness. Taking a low dose of progesterin or estrogen along with these drugs can protect against these side effects. When a woman stops taking this medicine, monthly periods and the ability to get pregnant return. She also might stay free of the problems of endometriosis for months or years afterward.
- **Progesterin** - The hormone progesterin can shrink spots of endometriosis by working against the effects of estrogen on the tissue. It will stop a woman's menstrual periods, but can cause irregular vaginal bleeding. Medroxyprogesterone (Depo-Provera) is a common progesterin taken as a shot. Side effects of progesterin can include weight gain, depressed mood, and decreased bone growth.
- **Danazol** is a weak male hormone that lowers the levels of estrogen and progesterone in a woman's body. This stops a woman's period or makes it come less often. It is not often the first choice for treatment due to its side effects, such as oily skin, weight gain, tiredness, smaller breasts, and facial hair growth. It does not prevent pregnancy and can harm a baby growing in the uterus. It also cannot be used with other hormones, such as birth control pills.

Surgery - Surgery is usually the best choice for women with severe endometriosis — many growths, a great deal of pain, or fertility problems. There are both minor and more complex surgeries that can help.

- **Laparoscopy** can be used to diagnose and treat endometriosis. During this surgery, doctors remove growths and scar tissue or burn them away. The goal is to treat the endometriosis

without harming the healthy tissue around it. Women recover from laparoscopy much faster than from major abdominal surgery.

- **Laparotomy or major abdominal surgery** that involves a much larger cut in the abdomen than with laparoscopy. This allows the doctor to reach and remove growths of endometriosis in the pelvis or abdomen.
- **Hysterectomy** is a surgery in which the doctor removes the uterus. Removing the ovaries as well can help ensure that endometriosis will not return. This is done when the endometriosis has severely damaged these organs. A woman cannot get pregnant after this surgery, so it should only be considered as a last resort.

Preventive Measures

There are no definite ways to lower your chances of getting endometriosis. Yet, since the hormone estrogen is involved in thickening the lining of the uterus during the menstrual cycle, you can try to lower levels of estrogen in the body.

To keep lower estrogen levels, one can:

- Exercise regularly
- Keep a low amount of body fat
- Avoid large amounts of alcohol and drinks with caffeine

Prognosis

- Hormone therapy and laparoscopy cannot cure endometriosis. However, these treatments can help relieve some or all symptoms in many women for years.
- Removal of the womb (uterus), fallopian tubes, and both ovaries (a hysterectomy) gives you the best chance for a cure. Rarely, the condition can return.

Possible Complications

Endometriosis can lead to Infertility. Laparoscopy to remove scarring related to the condition may help improve chances of becoming pregnant. If it does not, fertility treatments should be considered.

Other complications of endometriosis include:

- Large cysts in the pelvis (called endometriomas) that may break open (rupture)
- Endometriosis implants may cause blockages of the gastrointestinal or urinary tracts.

Use of LNG-IUS in treatment of Endometriosis



The T-shaped LNG-IUS releases 20 µg daily of levonorgestrel (the progestin widely used in implants and oral contraceptive pills) directly into the uterine cavity. This ensures high hormonal concentration in the endometrium and adjacent tissues and low hormonal levels in the blood stream. Thus, systemic side effects are minimized. Plasma levels of levonorgestrel with the

LNG-IUS are lower than those seen with subcutaneous implants, combined oral contraceptives, and progestin-only pills.

Levonorgestrel released by the LNG-IUS into the uterine cavity has several local effects, including thickening of the cervical mucus and inhibiting sperm movement. It also suppresses the growth of the endometrium. In addition, the LNG-IUS, like copper-bearing IUDs, creates a foreign-body reaction in the uterine cavity that hinders sperm and ovum transport, which prevents fertilization. In all cases, the LNG-IUS prevents pregnancy prior to implantation.

As Levonorgestrel suppresses the growth of Endometrium, LNG-IUS can be used for the treatment of endometriosis.

References

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