

Endometriosis

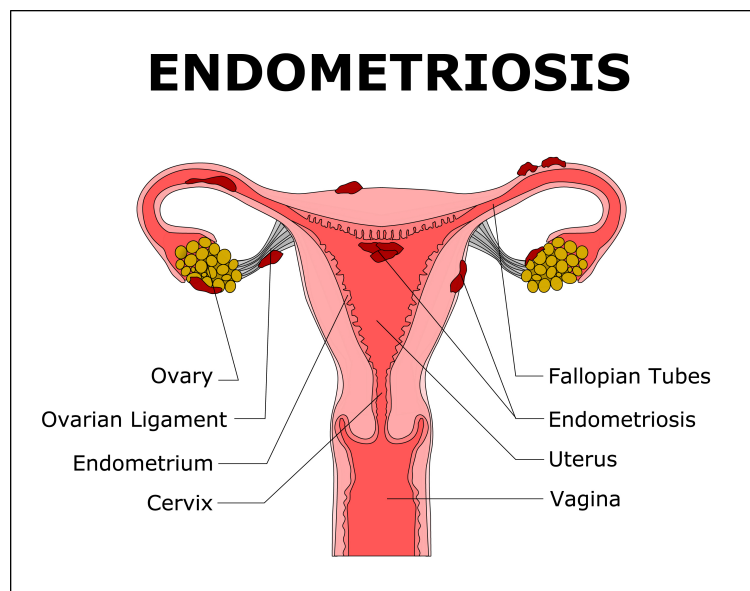
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What is Endometriosis?

The *endometrium* is the inner lining of the uterus. It is made up of blood vessels and glands which grow and shrink with a woman's menstrual cycle. *Endometriosis* is a condition in which cells like those in the inner lining grow in places outside of the uterus. These growths are sometimes referred to as implants. They most commonly appear in places such as:

- the ovaries
- uterine ligaments
- the peritoneum (the inner lining of the abdomen and pelvis)
- the intestines
- the bladder
- the stomach or liver

Very rarely, endometriosis can be found outside of the abdomen and pelvis.



Endometriosis implants can appear in many different places throughout the body.

How Common is Endometriosis?

Endometriosis is a fairly common condition. It's hard to know how many people have it as many women either don't have symptoms or don't get diagnosed. Studies show that anywhere between 5% and 21% of women with pelvic pain, and 40% to 52% of women with severely painful menses have endometriosis. Additionally, endometriosis implants are found in 1% of women undergoing surgery for any gynecologic reason. As many as 50% of women having surgery for pelvic pain or infertility have endometriosis. Women with family members who

have endometriosis may have a higher risk of having endometriosis themselves. However, there have been no studies that have confirmed this.

Why Does it Happen?

The reason why endometriosis develops is currently unknown. However, there have been many theories formed on why the condition occurs. There are four main theories that are accepted by the medical community:

1. Endometrial cells from the inner lining of the uterus flow backwards out of the uterus through the fallopian tubes and into the abdominal and pelvic cavity. Then they implant into the surrounding structures.
2. Stem cells on the surface of the ovary and lining of the abdomen and pelvis develop into endometrial-like tissue.
3. Endometrial cells from the uterus enter blood or lymphatic vessels which then transport these cells to distant sites where they implant.
4. Endometriosis occurs as a result of a problem with the immune system.

However, none of these theories have been confirmed.



Endometriosis can be a challenging, painful condition. But you are not alone!
Photo via @anthonytran/Unsplash

Endometriosis is known to be estrogen dependent. Estrogen, the primary female sex hormone, is produced by the ovaries and has a direct effect on the growth of the endometrium during the first half of a menstrual cycle. For women with endometriosis, this means that the estrogen effect will also cause implants to grow. Implants then produce secretions and bleeding coinciding with a woman's menses resulting in the classic symptom of painful menses (also called

dysmenorrhea). When collections of secretions and blood organize within an implant, they can form cysts called *endometriomas*. After menopause, the ovaries stop producing estrogen. As a

result, postmenopausal women stop menstruating and implants will typically stop growing as well.

It is important to note that endometriosis is a benign condition. This means that it is not a cancer. Some very rare types of ovarian cancer are more common in women with endometriosis but the risk of either of these cancers in women with or without endometriosis is less than 1%. Having endometriosis is not thought to increase the risk of cancer. There has been no research that definitively links endometriosis to cancer.

Symptoms

The symptoms of endometriosis can vary from person to person. Women with minimal disease may present with severe symptoms whereas women with severe disease may experience minimal symptoms. Common symptoms are:

- ✦ painful menses (dysmenorrhea)
- ✦ painful sex (dyspareunia)
- ✦ painful bowel movements (dyschezia)
- ✦ infertility, usually from pelvic scarring, large endometriomas, or inflammation of the fallopian tubes which can stop an egg from moving from the ovary to the uterus
- ✦ pelvic pain
- ✦ constipation
- ✦ diarrhea
- ✦ urinary urgency and/or frequency
- ✦ blood in the urine or stool

Diagnosis

Having these symptoms does not mean that you have endometriosis. Women who have these symptoms should talk to their doctor though. Typically, your doctor will do a pelvic exam first. The doctor will try to feel for the presence of endometriosis implants or large endometriomas. The doctor may order a pelvic ultrasound for confirmation. However, there is no physical exam or test that can definitively diagnose endometriosis. In fact, the only way that endometriosis can be definitively diagnosed is by seeing implants during surgery. In order to confirm endometriosis, your doctor may do a diagnostic laparoscopy. This is a minimally invasive surgery that involves inserting a camera and instruments into the abdomen through small incisions on the abdomen. If implants or endometriomas are seen with the camera, they can be biopsied or removed.

In most cases, treatment for endometriosis is started based on symptoms and physical exam alone. The surgery described above can introduce additional risks to the patient.

Treatment

Treatment for endometriosis is typically geared towards relieving the symptoms. If you don't have symptoms, you don't need to be treated. Treatment options vary, depending on how severe the disease is.

Watchful Waiting

For minimal to mild disease, the doctor may suggest watchful waiting. This means that there is no intervention except for over-the-counter pain medications when needed. This option is given to women who may not wish to start any medications that can affect their menstrual cycles, or who do not want to have surgery. This may also be an option for women who are nearing menopause as symptoms typically improve or stop after menopause.

Medications

For mild to moderate disease, the first-line treatment is typically birth control pills. These pills contain a naturally occurring hormone called progesterone that causes the implants to break down. Birth control pills can also stop you from having a period, which can help with painful periods. In some studies, birth control pills have helped 73%-86% of women after 4-24 months of treatment. Injectable birth control (such as Depo-Provera) also has been found to reduce pain in up to 72% of women after 1 year of use. Unfortunately, symptoms usually return after stopping these medications.



Birth control pills and GnRH agonists are common medications used to treat endometriosis. Photo via @freestocks/Unsplash

If treatment with birth control pills or injection does not help, there are other medications that may be offered to you. These medications are called GnRH agonists. They work by stopping your ovaries from making estrogen. This stops a woman from having menstrual cycles. These

medications can relieve pain symptoms in 70%-90% of individuals. The downside to these medications is that they cause side effects that are common to menopause, such as:

- hot flashes
- night sweats
- sleep disturbances
- vaginal dryness
- loss of bone density

As a result, these medications are typically not recommended to be used more than 6 to 12 months.

Surgery

Surgery is an option for women with extensive endometriosis that causes pain, infertility, or other symptoms that haven't gotten better with medication. The goals of surgery are to destroy smaller implants by burning them and to remove larger or deeply invasive implants. The type of surgery will depend on the location of the implants, the symptoms present, the extent of disease, and the patient's wishes.

Take Home Points

- Endometriosis is a condition in which cells resembling the inner lining of the uterus grow in places outside of the uterus.
- Endometriosis is a benign condition. This means that it is not a cancer.
- Symptoms of endometriosis can vary from woman to woman. Symptoms include painful menses, painful sex, painful bowel movements, and infertility.
- Treatment is geared towards relieving the symptoms of endometriosis and can include birth control medications, hormone-regulating medications, and surgery.
- For more information on endometriosis, talk to your doctor.

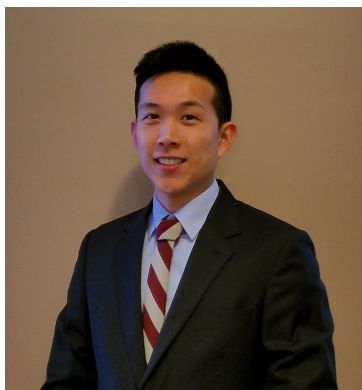
Resource

Additional information can also be found on the American College of Obstetricians and Gynecologists' website at <https://www.acog.org/Patients/FAQs/Endometriosis>.

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No conflicts of interest to report.



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