# **ENDOMETRIOSIS**

Endometriosis is a condition in which endometrial tissue grows outside the uterus 1. It men,

Endometriosis affects up to 10% of women between the ages of 15 and 44 most often occurs on or around reproductive organs in the pelvis or abdorincluding:
Fallopian tubes
Ligaments around the uterus (uterosacral ligaments)
Lining of the pelvic cavity
Ovaries
Outside surface of the uterus
Space between the uterus and the rectum or bladder
More rarely, it can also grow on and around the:
Bladder
Cervix
Intestines
Rectum
Stomach (abdomen)

Endometrial tissue growing in these areas does not shed during a menstrual cycle like healthy endometrial tissue inside the uterus does. The buildup of abnormal

Vagina or vulva

tissue outside the uterus can lead to inflammation, scarring and painful cysts. It can also lead to buildup of fibrous tissues between reproductive organs that causes them to "stick" together.

Period Pain: Could It Be Endometriosis?

Endometriosis affects hundreds of thousands of women every year. Cramps are never pleasant, but for women with endometriosis, they're unbearable. Discover which symptoms may indicate endometriosis.

## **Endometriosis Causes**

Doctors do not know exactly what causes endometriosis, but there are a few theories of what might cause it:

Blood or lymph system transport: Endometrial tissues are transported to other areas of the body through the blood or lymphatic systems, similar to the way cancer cells can spread through the body.

Direct transplantation: Endometrial cells may attach to the walls of the abdomen or other areas of the body after a surgery, such as a C-section or hysterectomy.

Genetics: Endometriosis seems to affect some families more often than others, so there may be a genetic link to the condition.

Reverse menstruation: Endometrial tissue goes into the fallopian tubes and the abdomen instead of exiting the body during a woman's period.

Transformation: Other cells in the body may become endometrial cells and start growing outside the endometrium.

# **Endometriosis Symptoms**

The most common signs of endometriosis are pain and infertility. Endometriosis pain typically presents as:

Painful menstrual cramps that may go into the abdomen (stomach) or lower back

Pain during or after sex

Other symptoms may include:

Diarrhea or constipation during a menstrual period

Fatigue or low energy

Heavy or irregular periods

Pain with urination or bowel movements during a menstrual period

Spotting or bleeding between menstrual periods

Each person's experience with endometriosis is different. Women with endometriosis may have some of these symptoms, all of these symptoms or none of them. Having severe pain or other symptoms is not necessarily a sign of more severe endometriosis.

# **Endometriosis and Infertility**

Endometriosis is one of the most common conditions linked to female infertility. The American Society for Reproductive Medicine found that 24% to 50% of women with infertility have endometriosis. Mild to moderate cases of endometriosis may only cause temporary infertility. Surgery to remove the endometrial tissue can help a woman become pregnant.

Doctors don't know exactly how endometriosis affects fertility. Scar tissue from endometriosis may affect the release of eggs from the ovaries or block the path of the egg through the fallopian tube so it cannot get to the uterus. Endometriosis may also damage sperm or fertilized eggs before they implant in the uterus.

Many women with endometriosis or endometriosis-related infertility can still get pregnant and carry a successful pregnancy. There are treatment options, including fertility preservation and in vitro fertilization (IVF) that may help women become pregnant. Talk to your doctor about your fertility goals when discussing your endometriosis treatment plan.

# **Endometriosis Diagnosis**

Doctors may suspect endometriosis based on your history or physical exam, and may use these tools to diagnose endometriosis:

Laparoscopy: In this procedure, a doctor makes a small cut in the abdomen and inserts a thin tube with a light and a camera. This allows the doctor to look at the tissues in and around the uterus, and check for signs of endometrial tissue growth.

Biopsy: If the doctor finds suspicious tissue, he or she may use a small device to scrape off a few cells and send them to the laboratory. A pathologist examines the tissues under a microscope. Biopsy is required for definitive diagnosis of endometriosis.

How to diagnose endometriosis without surgery

There is no lab test, procedure or imaging that can be done to diagnose endometriosis without surgery. However, imaging studies can be useful to look for signs of endometriosis. Common diagnostic imaging exams include:

Ultrasound: This procedure uses sound waves to view organs. Transvaginal ultrasounds use a small wand inserted into the vagina to see the uterus, pelvic area and reproductive organs.

MRI: This noninvasive scan uses magnetic waves to look at organs and tissues inside the body.

**Endometriosis Stages** 

Doctors classify endometriosis from stage 1 to stage 4. The stages are based on where endometrial tissue occurs in the body, how far it has spread and how much tissue is in those areas.

Having a more advanced stage of endometriosis does not always mean you will have more severe symptoms or more pain. Some women with stage 4 endometriosis have few or no symptoms, while those with stage 1 can have severe symptoms.

# **Endometriosis Treatment**

There is no lasting treatment for endometriosis, but doctors can offer treatments that help you manage it. Finding the right treatment depends on many different factors, including your age and symptoms. Doctors will also discuss whether you want to have children, which can help determine the best treatment options.

## **Nonsurgical endometriosis treatments**

The most common treatments for endometriosis that do not require surgery are hormone therapy and pain management.

Endometriosis tissues are affected by hormones in the same way as endometrial tissues inside the uterus. Hormone changes that occur with a menstrual cycle can make endometriosis pain worse.

Treatments that include hormone therapy can alter hormone levels or stop your body from producing certain hormones. Hormone therapy can affect your ability to get pregnant, so it may not be right for everyone.

Hormone therapy can be taken as pills, shots or a nasal spray. The most common options include:

Oral contraceptives with estrogen and progesterone to control hormones

Progestins to stop menstrual periods and endometrial tissue growth

Gonadotropin-releasing hormone antagonist to limit ovarian hormones

Gonadotropin-releasing hormone agonist to stop ovarian hormones

Pain medications, including nonsteroidal anti-inflammatory drugs (NSAIDs) like ibuprofen, can be effective for managing endometriosis pain. A doctor can also discuss whether you need prescription medications for more severe pain.

## **Laparoscopy for endometriosis**

Patients who have more advanced endometriosis, pain that does not resolve with other treatments or are trying to conceive may need surgery. Laparoscopy is the most common surgery doctors use to treat endometriosis.

During this procedure, a surgeon makes a few small incisions in your abdomen. In one incision they insert a thin tube with a light and a camera. In the other incisions they insert small tools. These tools can remove endometrial tissue (excision) or use intense heat to destroy the tissues (ablation).

The surgeon can also remove any scar tissue that has built up in the area. Laparoscopic surgeries usually have a shorter recovery time and smaller scars compared with traditional open surgery (laparotomy).

#### **Laparotomy for endometriosis**

In some cases, a doctor may need to do a laparotomy for endometriosis instead of laparoscopy. That means the doctor will make a larger incision (cut) in the abdomen to remove the endometrial tissue. This is uncommon.

Removing endometrial tissues with laparoscopy or laparotomy can provide shortterm pain relief. However, the pain may come back.

## **Hysterectomy for endometriosis**

A hysterectomy is a surgical procedure to remove the uterus. Doctors may recommend this as an option to treat endometriosis. Your doctor may also recommend removing the ovaries (oophorectomy) with or without a hysterectomy. This will stop the release of hormones and should definitively treat endometriosis, but it will put you into menopause.