

## Endometriosis

Endometriosis is a condition that occurs when tissue similar to the lining of the uterus grows outside of the uterus. This tissue may grow on the ovaries, fallopian tubes, exterior surface of the uterus or may involve other organs in the belly such as urinary system or gastrointestinal tract. The most common presentations include severely painful periods or infertility.

Your doctor will perform a physical exam. If they suspect endometriosis, they may order a pelvic ultrasound, abdominal and pelvic MRI, or a laparoscopy to confirm the diagnosis. Treatment will depend on symptoms and whether or not you plan to have children. Treatments range from over-the-counter pain medication to surgical removal of the ovaries and/or uterus.

### What is endometriosis?

Endometriosis is a common, sometimes painful condition that occurs when tissue similar to the uterine lining (endometrium) grows outside the uterus. The condition may affect the ovaries, fallopian tubes, the exterior surface of the uterus and tissues that hold the uterus in place or may involve other organs in the belly such as the intestines or may block the tubes (called ureters) that allow urine to drain from the kidneys to the urinary bladder. This tissue may behave like normal endometrial tissue by swelling and bleeding every month during menstruation with blood products accumulating over these organs because of inability to flow out of the body like a normal period. These can in turn cause pain or blockage of fallopian tubes resulting in inability to have children.

The exact cause of endometriosis is unknown. However, doctors are researching potential causes, such as:

- Faulty menstrual flow – during menstruation, menstrual flow may back up into the fallopian tubes. Any shed endometrial tissue may then flow into other areas of the body.
- Genetics – endometriosis may be a genetic condition because it tends to run in families.
- Immune system disorders – endometriosis may occur because the immune system fails to recognize endometrial tissue outside the uterus as a threat.
- Estrogen levels – estrogen may promote endometriosis. However, the relationship between the two is highly complex and not fully understood.
- Misplaced endometrial tissue – tissue may be mistakenly transferred to another area of the body during hysterectomy or cesarean surgery giving rise to this condition in surgical scars in the body wall.

Abdominal pain is the most common symptom of endometriosis. It may occur during menstruation, during sex, or when using the toilet. Other symptoms may include:

- Painful heavy menstrual bleeding
- Difficulty in becoming pregnant

There is a very small chance of cancer developing inside endometrial tissue either within the ovaries (younger age) or outside the



ovaries and uterus (older age). See the *Endometrial Cancer* (<https://www.radiologyinfo.org/en/info/endometrial-cancer>) page for more information.

## How is endometriosis diagnosed and evaluated?

Your doctor will ask about your medical history and symptoms and perform a physical exam. If your doctor suspects endometriosis, you may undergo:

- *Pelvic Ultrasound* (<https://www.radiologyinfo.org/en/info/pelvis>) uses sound waves to produce pictures of the uterus, ovaries, and fallopian tubes. In transvaginal pelvic ultrasound, the doctor inserts a device into the vagina for a better view of the uterus.
- Abdominal and Pelvic MRI (<https://www.radiologyinfo.org/en/info/mri-abdomen-pelvis>) uses a powerful magnetic field, radiofrequency pulses, and a computer to produce detailed pictures of the uterus, fallopian tubes, and ovaries.
- Laparoscopy and examination of the tissue in a lab is the surgical way to determine whether you have endometriosis. Your doctor may use laparoscopy to remove a tissue sample for examination in a pathology lab for confirming the diagnosis.

## How is endometriosis treated?

Managing pain and trying to have children are the main goals of treatment. Treatment options include medications and surgery.

### • Medications

Your doctor may suggest over-the-counter medication to ease menstrual pain if you are trying to get pregnant. If you are not trying to get pregnant, your doctor may prescribe hormone therapy to modify your menstrual cycle and slow the growth of endometriosis tissue. The release of hormones during the menstrual cycle causes endometriosis tissue to grow, break down and bleed along with the lining of the uterus. Hormone treatment may slow the growth of existing endometriosis tissue and block new tissue from forming. Hormone treatment is not a cure; symptoms may recur if you stop treatment.

### • Surgery

Your doctor may recommend surgery to remove endometriosis tissue and conserve your uterus and ovaries. This approach helps preserve your ability to carry a pregnancy. However, it is not a cure; symptoms may recur after treatment. If you do not plan to have children, your doctor may recommend removing the ovaries (oophorectomy) and removing the uterus (hysterectomy). Oophorectomy will cause early menopause and may not eliminate endometriosis pain.

## Which test, procedure or treatment is best for me?

- Abnormal Uterine Bleeding (<https://www.radiologyinfo.org/en/info/acs-abnormal-uterine-bleeding>)
- Second and Third Trimester Vaginal Bleeding (<https://www.radiologyinfo.org/en/info/acs-second-and-third-trimester-vaginal-bleeding>)

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