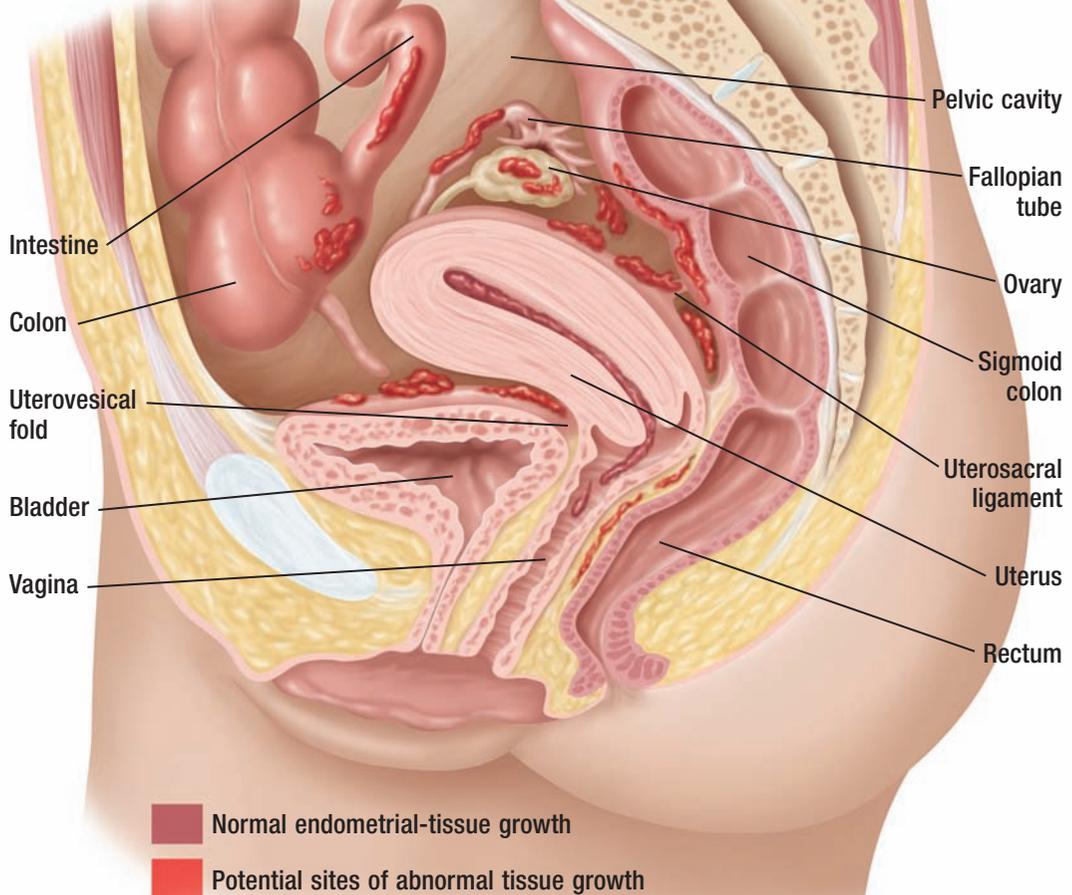


Endometriosis



Uterine-Lining Tissue That Grows Outside the Uterus

The interior of the uterus is lined with a mucous membrane known as the endometrium. Each month, estrogen and progesterone stimulate the endometrial cells to grow and thicken in order to prepare for possible implantation of a fertilized egg. If a fertilized egg is not implanted during a monthly cycle, the endometrial lining breaks down and is shed during menstruation.

Endometrial tissue sometimes develops in other areas of the body, resulting in a condition known as endometriosis. This tissue may occur in the ovaries, fallopian tubes, bladder, rectum, bowel, or pelvic or abdominal cavity. Even though the tissue is located outside the uterus, it responds to monthly hormonal changes by breaking down and bleeding as if it were part of the shedding endometrium. Swelling and the eventual breakdown and bleeding of endometriotic tissue can cause pelvic or lower back pain, bleeding into surrounding tissue, and scarring. Many women with endometriosis experience symptoms, but sometimes the disease is asymptomatic. Damage caused by endometriosis cannot be reversed and may lead to scarring, cyst formation, or infertility.

Endometriosis treatment depends upon the patient's age, extent of pelvic involvement, symptom severity, and desire for pregnancy. Mild pain sometimes can be controlled by nonsteroidal anti-inflammatory drugs (e.g., ibuprofen, naproxen). Monthly cycles may be manipulated by using estrogen and progesterone to control endometrial growth, breakdown, and bleeding. Gonadotropins can shut down the ovaries' production of estrogen, but they have side effects. If pregnancy is desired or if medications do not relieve symptoms, surgery to remove the endometrial tissue and surrounding scar tissue is an effective alternative. Another option is partial or total hysterectomy, which cures endometriosis in most patients.

Copyright Jobson Medical Information LLC, 2011

continued ▶

Pain Severity Does Not Indicate the Severity of Disease

Endometriosis, a condition in which the tissue lining the inside of the uterus also grows elsewhere in the body, is usually diagnosed when a woman is in her mid-20s to mid-40s, but probably begins much earlier. Women who have not had children or who have a close relative with endometriosis are at greater risk, as are women whose menstrual cycles are less than 28 days or whose periods last longer than 7 days.

It is unclear why endometriosis occurs or why endometrial cells develop outside the uterine lining. During menstruation, these cells may be transported backward through the fallopian tubes and into the pelvic or abdominal cavity. Another theory is that endometrial cells enter the bloodstream or lymph system during normal endometrial shedding and are transported to other parts of the body.



It is not known why, in some women, endometrial tissue grows outside the uterus.

Symptoms and Diagnosis

Symptoms of endometriosis do not always occur, even with extensive disease. The severity of symptoms such as pain is not necessarily related to the severity of the condition. Mild endometriosis may cause serious pain in one woman, while in another significant disease may go unnoticed until a physician is consulted for infertility. Most women with endometriosis have some degree of pelvic pain. Pain may occur just before menstruation begins, during menstrual bleeding, while having a bowel movement or urinating, or during sexual intercourse. The pain is caused by endometrial-tissue breakdown and scar-tissue formation in the area. In many cases, the bleeding and scarring cause permanent adhesions (scar tissue attaching two separate organs) in the pelvic region. Sometimes, an endometrioma (cyst made of endometrial tissue) forms on the ovary.

Endometriosis is diagnosed by symptom history, pelvic examination, transvaginal ultrasound, and/or pelvic laparoscopy. In laparoscopy, a small tube with a lighted camera is inserted into the pelvic cavity; during the procedure, a piece of tissue may be biopsied to confirm diagnosis, or endometrial tissue may be removed.

Treatment

Treatment is based on symptom severity, disease involvement, and desire for pregnancy. Nonsteroidal anti-inflammatory drugs may be used for mild pain, but they do not treat the cause of endometriosis. Hormone-containing medications can ease the pain and control the cyclic swelling, bleeding, and scarring of endometrial tissue, but they have side effects and do not reverse existing scarring.

Using birth control pills continuously for up to 9 months and then stopping them briefly to permit menstruation can relieve symptoms by creating an artificial pregnancy state. In fact, many pregnant women experience relief from endometrial pain because of the hormonal shift. Side effects of this therapy include nausea, breast tenderness, and spotting.

Gonadotropin-releasing hormone (GnRH) may be used to shut down the ovaries' production of estrogen, similar to what occurs in menopause. GnRH causes menopausal symptoms such as hot flashes and bone-density loss. Progestin, which stops menstruation by working against estrogen's effects, also may be used, but it may cause moodiness, weight gain, and bloating.

Surgical removal of endometrial tissue and surrounding scar tissue typically is reserved for severe cases that do not respond to hormone therapy or for infertile patients wishing to conceive. Endometriosis is permanently cured in about 50% of patients; in the rest, symptoms may return within a year.

The most permanent treatment is hysterectomy (removal of the uterus). The ovaries may be removed as well, further reducing the chance of symptoms returning. The patient will no longer menstruate or be able to conceive, and endometriosis is highly unlikely to return.