

Endometriosis

by Leandro Rodriguez, MD

Endometriosis is a condition in which tissue similar to the cells of the lining of the uterus (endometrium) grows in other areas of the body. This abnormal growth can cause pelvic pain, irregular bleeding, and infertility. The most commonly affected areas are the ovaries, bowel, or the lining of the pelvis.

Just like normal cells of the lining of the uterus, endometriosis implants are stimulated by estrogen (the principal female sex hormone). This stimulation produces thickening and a small amount of bleeding inside the pelvis. Chronic inflammation produced by these changes can cause pain and scar tissue in the internal pelvic organs. Typically, pain related with endometriosis is worse during the period. Pain can also be present with intercourse, bowel movements, or urination.

Diagnosis

To diagnose endometriosis your doctor will ask you to describe the symptoms, including the location of the pain and when it occurs. This will be followed by a pelvic exam on which the doctor will palpate the pelvic organs and will identify the areas that are tender. In most cases, the lesions of endometriosis are small and therefore cannot be palpated.

A vaginal ultrasound is another way in which your doctor can evaluate the reproductive organs. It will not definitively diagnose endometriosis, but it can identify cysts associated with endometriosis (endometriomas).

The diagnosis of endometriosis can only be certain after a laparoscopy. During this surgery the surgeon insufflates the abdomen with carbon dioxide and then introduces a camera (laparoscope) through a small incision in the navel. By moving the laparoscope your doctor can visualize the uterus, ovaries, fallopian tubes, bowel, and lining of the pelvis and look for signs of endometrial tissue outside the uterus.

Treatment

Medications:

- **Non-steroidal anti-inflammatory drugs:** Medications like Advil, Aleve, and Ibuprofen may be recommended. This group of medications is more effective when taken at the first sign of the period or pain.
- **Hormonal contraception (birth control pills):** Normal fluctuations in the hormone levels during the menstrual cycle causes endometrial implants to

thicken, break down and bleed. Birth control pills work by limiting the growth of the endometrial cells by eliminating the rise and fall of hormones during the menstrual cycle.

- **Depo Provera:** This injectable medication can stop menstruation and decrease the growth of endometriosis.
- **Gonadotropin-releasing hormone agonist and antagonist:** These drugs block the production of ovarian stimulating hormones that are produced in the pituitary. By stopping the stimulation to the ovaries the production of estrogen is greatly reduced. Lower estrogen levels can cause endometrial implants to shrink. These hormones mimic menopause and therefore common side effects include hot-flashes, mood-swings, insomnia, and vaginal dryness.

Other Treatments:

- Regular exercise produces chemicals that may block the pain. For some patients a regular exercise regimen, especially around their menstrual period may decrease the symptoms.
- Heat: a warm bath or a heating pad on the abdominal/pelvic area.
- Relaxation, yoga, acupuncture: These techniques can help some patients cope with the pain.

Surgery:

When treatment with medications is not effective, the next step in management is surgery. The definitive surgical management is a total hysterectomy during which the uterus and ovaries are removed. Such surgery will cause menopause and therefore eliminate the production of estrogen by the ovaries. The absence of estrogen will eliminate the stimulation of the endometriosis implants and permanently treat endometriosis. This type of surgery is the **last resort** and is **not an option in younger patients who want to become pregnant**.

Another option is conservative surgery during which the endometrial tissue that is growing outside the uterus can be removed or destroyed. This tissue may return after surgery, but removing it may reduce pain for a significant period of time.

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