What You Should Know About **Endometriosis**

Alice, age 22, has very bad cramps. They start a few days before menstrual bleeding and last throughout her period. Every month, the cramps seem to get worse. Recently, she's noticed some bleeding in between periods.

Tanisha, age 28, sometimes has cramps that go away quickly if she takes ibuprofen. For the past year, Tanisha has been trying to get pregnant, but so far, she hasn't been successful.

Lilliana, age 32, has never had much of a problem with cramps. She had no difficulty getting pregnant with either of her children.

Alice, Tanisha, and Lilliana are three of the estimated 5.5 million women in North America who have endometriosis. The condition can occur anywhere between the time a woman begins having periods and the time they stop, at menopause.

What Is Endometriosis?

To understand endometriosis, you need to know a little about female anatomy. The uterus is where a fertilized egg grows into a baby when you become pregnant. This hollow muscular organ is lined with endometrium—a spongy bed of tissue, mucus, and blood vessels. When girls begin having periods, their hormones prepare their bodies to become pregnant each month by making the endometrium grow and thicken. If a fertilized egg does not arrive in the uterus, hormone levels decrease and the endometrium is shed, exiting through the vagina as a menstrual period.

In some women, bits of tissue from the endometrium find their way to places where they don't belong—outside or behind the uterus, on or around the ovaries, outside the bowel or bladder, and on the ligaments that support the uterus. These bits of tissue are called endometrial implants, nodules, or lesions. When the endometrium inside the uterus builds up, these implants also swell and grow, and when the endometrium inside the uterus sheds and bleeds, so do the misplaced endometrial implants. But since there is no way for the blood to leave the body, it accumulates and breaks down, producing irritating and pain-causing chemicals.

This Patient Handout was prepared by Diane E. Judge, NPN, CNP, using materials from the National Institute of Child Health and Human Development (http://www.governmentguide.com)

Symptoms of Endometriosis

Like Lilliana, women can have endometriosis and never have any symptoms. Others, like Alice and Tanisha, become aware that something is wrong when they have one or more of the following symptoms:

- Severe menstrual cramps, often starting before a period and getting worse over the years. Cramps may be so bad that some women cannot go to school or work during their periods.
- Chronic (6 months or more) pain in the lower abdomen or back.
- Pain during or after intercourse, or when inserting and removing tampons.
- Pain with urination or bowel movements during menstrual periods.
- Particularly heavy periods.
- Bleeding or spotting between periods, or for several days before menstrual flow starts.
- Infertility, or inability to become pregnant within 12 months of having regular intercourse without any kind of birth control. About 3 to 4 of every 10 women with endometriosis have this problem.

Diagnosing Endometriosis

If you have one or more endometriosis symptoms, you and your health care provider should discuss whether you should be checked for the condition. Before doing any test, your health care provider will ask you questions about your health and perform a careful physical examination, including a pelvic examination. However, just a history and physical exam cannot tell for sure.

One way of checking for endometriosis is through ultrasound. By bouncing sound waves off the pelvic organs through a probe, the ultrasound device produces a computerized picture. Magnetic resonance imaging provides even more detailed pictures using magnets and radio waves, but is much

more expensive. Either procedure may miss seeing endometriosis even if you have it.

The only accurate way of diagnosing endometriosis is to look directly inside the pelvis during a surgical procedure. Most often this is done by laparoscopy. In this procedure, the surgeon inserts a hollow viewing scope into the lower abdomen through a small incision and looks directly at the uterus, tubes, ovaries, intestines, and bladder. If suspicious areas are present, he or she can take a sample of tissue (biopsy) to be examined under a microscope.

Treating Endometriosis

Endometriosis cannot be cured, but symptoms can usually be controlled. If you have endometriosis without pain or fertility problems, you may not need or want treatment. Discuss the advantages and disadvantages of treatments with your health care provider.

For endometriosis pain, there are several choices:

Anti-cramp medications.—Over-the-counter or prescription pain medications provide adequate relief for some women. If your period comes at a predictable time every month, starting the medication just before your period can be effective.

Birth control methods containing hormones.—When you take birth control pills, or use the birth control patch or vaginal ring, the uterine lining and the endometrial implants do not thicken and bleed as much. You can use any of these methods continuously, so you do not get any periods at all. Birth control injections also decrease the amount of build-up and breakdown of the uterine lining and endometrial implants; many women who use injectable contraception stop having periods entirely. If you desire birth control, these methods may control endometriosis as well as provide protection from unintended pregnancy. You may experience some side effects from these methods, such as breast tenderness, sore breasts, nausea, weight gain or loss, or change in desire for sex; however, these side effects usually improve over time. When you stop using any of these methods, the pain may return.

Danocrine.—This drug tells your brain to stop signaling the ovaries to release an egg, causing your menstrual cycle to shut down. When your body no longer signals the uterine lining and the endometrial implants to grow, they become very thin, and the implants may go away altogether. You will get your period rarely or not at all while using danocrine. Because the drug can harm a developing baby, you should not become pregnant while using it. You will need to choose a hormone-free method of birth control, such as a diaphragm, cervical cap, or condoms and spermicide. Because danocrine has some male-hormone-like side effects, you may develop oily skin, acne, weight gain, smaller breasts, and deepening of the voice.

Gonadotropin-Releasing Hormone Agonists.—This medication, given as a nasal spray or injection, puts your body into a temporary menopause-like state. Since the signals to build up and break down the endometrium no longer occur in menopause, the uterine lining grows thin and the endometrial implants may disappear. The treatment is usually used for about 6 months and then stopped. Side effects may be menopause-like, such as hot flashes, vaginal dryness, sleep problems, headaches, and fatigue. When the treatment is stopped, endometriosis symptoms return in about half of all women.

Surgery.—During a laparoscopy, areas of endometriosis can be cut out, burned off, or vaporized with a laser. If the pain is very severe, other treatments have not worked, and you already have children and do not wish to have more, surgery to remove the uterus (hysterectomy), with or without the fallopian tubes and ovaries, may be considered.

Endometriosis and Infertility

No one knows why endometriosis can cause infertility. It may change the lining of the uterus so an embryo can't implant and grow. It may change the egg in some way, or block the fallopian tubes so a fertilized egg can't travel its usual path to the uterus.

In select patients, surgery to remove the endometrial growths may be helpful in allowing women with endometriosis to become pregnant. If you are not able to become pregnant within 6 to 12 months, your health care provider may refer you to other providers who can offer infertility treatment.

Endometriosis can cause severe menstrual cramps and other types of pain during the menstrual cycle, unusual bleeding patterns, and/or infertility. However, not all women with cramps and menstrual pain have endometriosis, and not all women with endometriosis will have difficulty getting pregnant. If you or your health care provider think you may have endometriosis, discuss your options for diagnosis and treatment.

Resources

The National Institute of Child Health and Human Development
http://www.nichd.nih.gov

The Endometriosis Association
http://www.endometriosisassn.org

The American Society for Reproductive Medicine
http://www.asrm.org

The National Women's Health Information Center
http://www.4woman.gov/faq/infertility.htm

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