

Adenomyosis

Overview

Adenomyosis (ad-uh-no-my-O-sis) occurs when endometrial tissue, which normally lines the uterus, exists within and grows into the muscular wall of the uterus. The displaced endometrial tissue continues to act as it normally would — thickening, breaking down and bleeding — during each menstrual cycle. An enlarged uterus and painful, heavy periods can result.

Symptoms most often start late in the childbearing years after having children.

The cause of adenomyosis remains unknown, but the disease typically disappears after menopause. For women who experience severe discomfort from adenomyosis, certain treatments can help, but hysterectomy is the only cure.

Symptoms

Sometimes, adenomyosis is silent — causing no signs or symptoms — or only mildly uncomfortable. In other cases, adenomyosis may cause:

- · Heavy or prolonged menstrual bleeding
- Severe cramping or sharp, knifelike pelvic pain during menstruation (dysmenorrhea)
- Menstrual cramps that last throughout your period and worsen as you get older
- Pain during intercourse
- · Blood clots that pass during your period

Your uterus may get bigger. Although you might not know if your uterus is enlarged, you may notice that your lower abdomen seems bigger or feels tender.

When to see a doctor

If you have prolonged, heavy bleeding or severe cramping during your periods — and it interferes with your regular activities — make an appointment to see your doctor.

Causes

The cause of adenomyosis isn't known. Expert theories about a possible cause include:

- Invasive tissue growth. Some experts believe that adenomyosis results from the direct
 invasion of endometrial cells from the lining of the uterus into the muscle that forms the uterine
 walls. Uterine incisions made during an operation such as a cesarean section (C-section) may
 promote the direct invasion of the endometrial cells into the wall of the uterus.
- Developmental origins. Other experts speculate that adenomyosis originates within the
 uterine muscle from endometrial tissue deposited there when the uterus first formed in the
 fetus.
- Uterine inflammation related to childbirth. Another theory suggests a link between
 adenomyosis and childbirth. An inflammation of the uterine lining during the postpartum period
 might cause a break in the normal boundary of cells that line the uterus. Surgical procedures on
 the uterus may have a similar effect.
- Stem cell origins. A recent theory proposes that bone marrow stem cells may invade the
 uterine muscle, causing adenomyosis.

Regardless of how adenomyosis develops, its growth depends on the circulating estrogen in a woman's body. When estrogen production decreases at menopause, adenomyosis eventually goes away.

Risk factors

Risk factors for adenomyosis include:

- · Prior uterine surgery, such as a C-section or fibroid removal
- Childbirth
- · Middle age

Most cases of adenomyosis — which depends on estrogen — are found in women in their 40s and 50s. Adenomyosis in middle-aged women could relate to longer exposure to estrogen compared with that of younger women. Until recently, adenomyosis was most often diagnosed only when a woman had a hysterectomy. Current research suggests that the condition may also be common, but often undetected, in younger women.

Complications

If you often have prolonged, heavy bleeding during your periods, chronic anemia may result. Anemia causes fatigue and other health problems. See your doctor if you suspect you may have anemia.

Although not harmful, the pain and excessive bleeding associated with adenomyosis can disrupt your lifestyle. You may find yourself avoiding activities that you've enjoyed in the past because you have no idea when or where you might start bleeding.

Painful periods can cause you to miss work or school and can strain relationships. Recurring pain can lead to depression, irritability, anxiety, anger and feelings of helplessness. That's why it's important to see a doctor if you suspect you may have adenomyosis.

By Mayo Clinic Staff

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