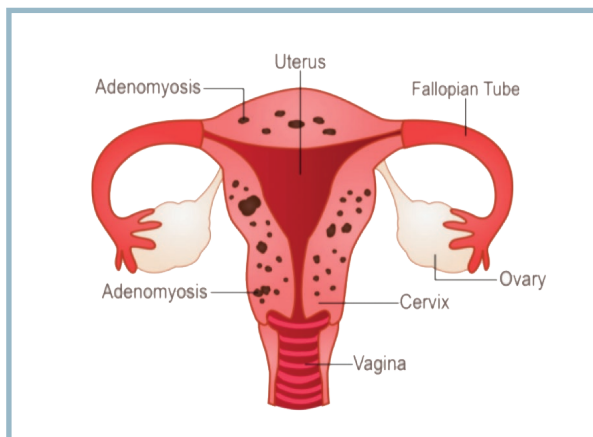


# What is Adenomyosis?

Adenomyosis occurs when individual cells that line the cavity of the uterus — called endometrial cells — migrate into the muscular layer of the uterus, where they don't belong. When these displaced cells migrate into the wrong layer, it causes a significant inflammatory response, because they are still responding to hormonal signals from the brain. As inflammation builds, the surrounding muscle swells and forms fibrous tissue in response to the irritation.



## What are the symptoms of Adenomyosis?

One of the key symptoms of adenomyosis is enlargement of the uterus. This swollen area within the uterine muscle wall, called an adenomyoma, feels very much like a fibroid on medical examination. It can be diffuse, occurring all over the uterus, or it can be localized to one area, which is called focal adenomyosis.

About a third of the women who have adenomyosis experience uncomfortable and painful symptoms. These symptoms — like **heavy menstruation, pelvic pain, and frequent urination** — can be severe. If left untreated, heavy bleeding experienced by patients with this condition can cause **chronic anemia and fatigue**. The disease can also severely affect a patient's quality of life due to chronic pain and bleeding.

## How is Adenomyosis diagnosed?

Adenomyosis symptoms can mimic the symptoms of other conditions, like endometriosis and uterine fibroids. This is why sometimes it takes patients years to get the correct diagnosis. Both adenomyosis and endometriosis are the result of abnormal endometrial growth in the wrong place, both seem to occur in the presence of excess estrogen. In cases that are truly severe and complex, both can occur at the same time.

A gynecologist specializing in the treatment of both fibroids and adenomyosis will of course be able to distinguish the difference.

### ADENOMYOSIS CAN BE DIAGNOSED BASED ON SEVERAL FACTORS:

- Patient's symptoms (severe cramps, heavy prolonged bleeding, pressure, bloating)
- A pelvic exam that reveals an enlarged, boggy uterus
- Ultrasound imaging of the uterus
- Magnetic resonance imaging (MRI) of the uterus
- In some instances, a biopsy sample of the lining of the uterine cavity can be collected to rule out other potentially serious conditions.

CONTINUED ON REVERSE

## What causes adenomyosis?

The cause of adenomyosis or fibroids is still not fully understood. Although the exact causes are not known, various studies have suggested a link to hormones like estrogen, progesterone, prolactin, and follicle-stimulating hormones.

## What Are the Treatments for Adenomyosis?

No two patients with adenomyosis are alike. And that means that treating this condition will be different for everyone. There are several factors that will determine which course of treatment is the best for you, including age, risk factors, medical history, and the severity of symptoms.

### WOMEN WHO HAVE BEEN DIAGNOSED WITH ADENOMYOSIS ARE OFTEN OFFERED THE FOLLOWING TREATMENT OPTIONS:

- **Non-Steroidal Anti-inflammatory Drugs (NSAIDs):** Anti-inflammatory medications, such as ibuprofen (Advil, Motrin IB, others), may help to control the pain and even reduce menstrual blood flow. Patients are usually advised to start taking an anti-inflammatory medicine one to two days before their period begins and continue taking it during their periods as needed.
- **Hormone medications:** Hormone therapy can be used to help ease any symptoms associated with significantly heavy or painful periods. The treatment only works while the patient is using the hormones. Symptoms return once the treatment stops. Hormone treatment is generally only used for less than six months, as the side effects are similar to the symptoms of menopause.
- **Uterine Artery Embolization:** A procedure that can treat not just fibroids. It has been proven very effective in the treatment of adenomyosis as well. The procedure is performed while the patient is moderately sedated; it does not require general anesthesia. The interventional radiologist makes a

tiny incision in the groin or wrist and inserts a catheter into the femoral or radial artery. Using real-time imaging, the physician guides the catheter through the artery and then releases tiny particles, the size of grains of sand, into the uterine arteries and their branches, thereby blocking the blood supply to the affected tissue causing it to shrink and symptoms to subside.

- **Hysterectomy:** The only curative treatment for adenomyosis is a hysterectomy, which is a complete removal of the uterus. At Viva Eve, our team of specialists will explore all of your treatment options and discuss whether any other less invasive method or treatment would work for your symptoms. While hysterectomy permanently relieves symptoms, it results in a loss of fertility. Hysterectomy is the second most common surgery performed on reproductive-age women in the U.S. after cesarean section, and it is estimated that 20 percent of all hysterectomies are unnecessary because physicians are under-utilizing alternative treatments.

Because the symptoms of fibroids and adenomyosis are so similar, misdiagnosis is incredibly common. It takes the very skilled eye of a gynecologist specializing in the treatment of both fibroids and adenomyosis to provide you with a perfectly correct diagnosis. Today, new imaging technology allows our specialists to see and accurately pinpoint locations and amounts of the displaced cells. The Viva Eve team of fibroid and adenomyosis experts will be able to properly diagnose your condition and suggest the best course of treatment.