

# Uterine Fibroids

## What Are Uterine Fibroids?

Uterine fibroids are noncancerous (benign) growths on or within the muscular walls of the uterus. They can be as small as a pea, or as large as a cantaloupe. Women may develop any of three primary types of uterine fibroids in various parts of the uterus:

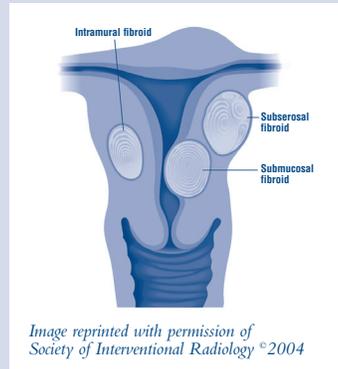


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- **Intramural fibroids** are the most common. They develop within the lining of the uterus and expand inward. They make the uterus feel larger than normal and often cause heavy menstrual bleeding, pelvic pain, back pain or urinary frequency.
- **Subserosal fibroids** develop under the outside covering of the uterus and expand through the wall, giving the uterus a knobby appearance. They can cause pelvic pain and back pain.
- **Submucosal fibroids** are the least common type. They develop just under the lining of the uterus. Even small ones can cause heavy and prolonged periods.

## What Are the Symptoms?

Some women may not know that they have fibroids, while others experience symptoms, such as pain, heavy bleeding or abdominal swelling. The symptoms depend on the size and location of the fibroid, but may include one or more of the following:

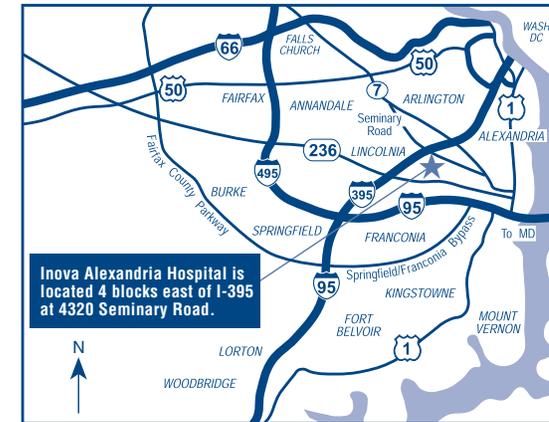
- heavy, prolonged menstrual periods, sometimes with clots
- pelvic pain, pressure or heaviness
- pain in the back or legs
- pressure on the bladder causing a constant urge to urinate
- pressure on the bowel causing constipation and bloating
- abnormally enlarged abdomen

## Who Is Most Likely to Have Uterine Fibroids?

Approximately 20 to 40 percent of women age 35 and older have uterine fibroids. African American women are at higher risk and as many as 50 percent have fibroids.

## How Are Uterine Fibroids Diagnosed?

Most fibroids are diagnosed when a physician feels an enlarged uterus during an internal gynecologic exam. Fibroids can be confirmed by an abdominal ultrasound, magnetic resonance (MRI) or computed tomography (CT), all of which are painless diagnostic procedures.



Inova Health System is a not-for-profit health care system based in Northern Virginia that consists of hospitals and other health services including emergency and urgent care centers, home care, nursing homes, mental health and blood donor services, and wellness classes. Governed by a voluntary board of community members, Inova's mission is to provide quality care and improve the health of the diverse communities we serve.

[www.inova.org](http://www.inova.org)  
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**Uterine  
Fibroid  
Embolization:**  
*A Safe, Effective  
Alternative to Surgery*



## Treatment Options

### How Are Uterine Fibroids Treated?

Most fibroids do not cause symptoms and are not treated. When they do cause symptoms, the first line of treatment is usually drug therapy. Birth control pills or other hormone therapy may be prescribed, along with nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or naproxen sodium.

If symptoms persist, your physician can help you decide which treatment is best for you based on your medical history, the location and size of the fibroids, and the severity of your symptoms. Your options may include the following:

- **Myomectomy** removes only the fibroids, not the uterus. This surgery is performed using a hysteroscope (a small scope inserted through the vagina and cervix), a laparoscope (a scope inserted through small incisions in the abdomen), or abdominal surgery (requiring incisions through the abdomen and the uterus).
- **Hysterectomy** removes the entire uterus either by a laparoscopic procedure through the vagina, or by an open surgical procedure. Uterine fibroids are the most common cause of hysterectomy in the country.

*Either of these surgical procedures requires a six-week recovery period.*

- **Uterine fibroid embolization (UFE)**, also known as uterine artery embolization, is an alternative to surgery that preserves the uterus. A non-surgical, minimally invasive procedure, UFE blocks the blood supply to fibroids, causing them to shrink.

## Uterine Fibroid Embolization (UFE)

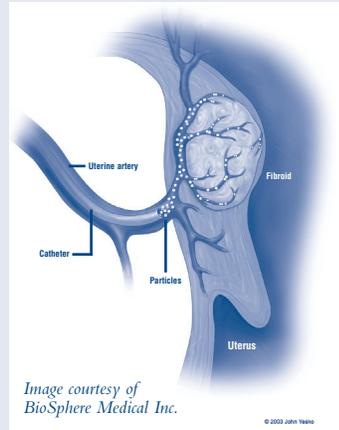
### How Is UFE Performed?

UFE is performed by an interventional radiologist — a doctor specializing in the use of imaging techniques to see inside the body and treat conditions without surgery.

During UFE, the patient is given pain medications but remains awake. The interventional radiologist inserts a small tube, called a catheter, through a tiny incision in the skin, less than a quarter of an inch, into an artery at the top of the thigh.

Using X-ray imaging, the catheter is guided into the uterine artery.

Then tiny, round particles, the size of grains of sand, are injected through the catheter into the blood vessels leading to the fibroids. These particles cut off the blood supply to the fibroid. This process is repeated in the other uterine artery, completely blocking the blood flow feeding the fibroid. Blocking the blood flow to the fibroids causes them to shrink and alleviates symptoms. The particles remain permanently in the blood vessels at the fibroid sites, and cannot travel to other parts of the body. The procedure typically takes less than one hour to complete.



### What Happens After the Procedure?

Typically, patients stay in the hospital overnight. Shortly after the procedure, most women experience abdominal cramping similar to menstrual cramps, or nausea. During the hospitalization, the patient receives medications to control these common side effects. By the morning after the procedure, these symptoms are usually gone. At home, the patient will likely have several days of intermittent cramps, and may feel somewhat weak. These symptoms usually begin to resolve within several days and most patients will fully recover in seven to 10 days.

### How Successful Is UFE?

Approximately nine women out of 10 who have this procedure experience significant or total relief of heavy bleeding, pain and other symptoms. The procedure is effective for multiple fibroids, and the recurrence of treated fibroids is very rare.

### Is This a Safe Procedure?

Fibroid embolization is considered a very safe procedure. For more than 20 years, interventional radiologists have used embolization in the uterus to treat heavy bleeding following childbirth. Embolization has been used since 1995 to treat fibroids. All devices, equipment and medications used for fibroid embolization are FDA approved. However, as with any medical procedure, there are risks. There is about a one percent chance of injury to the uterus. You should talk with your doctor about the possible side effects of any procedure you may choose.

### How Will UFE Affect My Fertility?

By preserving the uterus, women may have an opportunity for future pregnancy, but the full effect of UFE on fertility has not been evaluated. Our interventional radiologists are actively conducting research on this aspect of UFE treatment.

## Cardiovascular and Interventional Radiology at Inova Alexandria Hospital

Inova Alexandria Hospital's Cardiovascular and Interventional Radiology program treats a variety of medical conditions without traditional surgery.

Our nationally recognized, board-certified interventional radiologists perform minimally invasive procedures using small incisions, tiny instruments and imaging techniques. These procedures are generally less traumatic to patients than surgery, and result in less pain and shorter hospital stays.

They were some of the first doctors in the Mid-Atlantic region to perform uterine fibroid embolization (UFE). They currently have one of the largest and most successful UFE programs in the country. In addition, they performed the first peripheral and renal angioplasty and stent placement in Northern Virginia. The first abdominal aortic stent graft in Northern Virginia also was performed by their team.

They are experts at treating varicose veins, peripheral vascular disease (PVD), spinal bone fractures, abdominal aortic aneurysms and stroke. Each year they perform thousands of procedures. For more information, call **703-504-7950** or visit **www.inova.org**.

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*Minimally Invasive*