



A New Way of Treating Fibroids

FOR MANY WOMEN, THE PAIN AND EXCESSIVE bleeding associated with the menstrual cycle is an issue of much concern, great discomfort, and confusion. In some cases these symptoms are the direct result of uterine fibroids. This leads many women to conclude that hysterectomy may be the only available option for relief.

"We provide a procedure that is an alternative to a hysterectomy for select patients afflicted with fibroids. Knowing that options are indeed available empowers a woman to make informed decisions about her health. We at Inland Imaging are very excited to provide this procedure and these services to our patients," says Inland Imaging's Dr. David Liu, a renowned Interventional Radiologist specializing in minimally invasive (non-surgical) treatment procedures.

The procedure, known as Uterine Fibroid Embolization or UFE stems the flow of blood to the uterus and mitigates the excessive bleeding and pain associated with menstruation. One of the primary reasons to employ the use of UFE is to eliminate the use of hysterectomy as the only means of therapy and relief. As a result, the uterus and reproductive organs remain intact—a key issue for women of child-bearing age and desire.

The most common tumors in the female genital tract are uterine fibroids, also referred to as fibroids, leiomyoma, and myoma—but also referred to by other names and classifications. It is unclear what causes uterine fibroids. However, it is believed by researchers that fibroids may be linked to either a genetic predisposition, or the development of susceptibility, to hormone stimulation. Different ethnic or racial groups are more likely to develop fibroids. In addition, there tends to be a genetic pre-dis-

position for the development of fibroids among women in families with a history of the condition.

Individual fibroids can range in size from a quarter-of-an-inch to ten inches (or more) in diameter—roughly the size of a cantaloupe. There is typically more than one fibroid in the uterus and these can be located in various areas of the uterus. The three primary types of fibroids are:

Subserosal Fibroids These fibroids develop outside of the uterus and expand outward giving the uterus a knobby appearance. This type does not typically affect the menstrual cycle, however can cause pelvic pain, back pain, and generalized pressure.

Intramural Fibroids These develop within the lining of the uterus and expand inward. This is the most common type of fibroid. This can result in heavier menstrual bleeding, pelvic pain, and back pain.

Submucosal Fibroids Found just under the uterus lining, these are the least common type of uterine fibroid. Even an extremely small submucosal fibroid can cause heavy bleeding—gushing, and very heavy, and prolonged periods.

Diagnosis

So now that we know what uterine fibroids are, how do we know if that is what is causing the pain that we, as women, typically try to ignore? The most common way to determine if you have fibroids is during an examination with your gynecologist. Fibroids may be discovered when the doctor is able to feel that the uterus is enlarged.

The presence of fibroids is typically confirmed by an ultrasound procedure—where the technician moves an ultrasound transponder across your abdomen. In some cases however, a transvaginal ultrasound examination may

be necessary. In this case, the radiologist inserts an ultrasound probe into the vagina so that a clearer picture of the uterus is visible.

Treatment

The treatment will depend on several factors, including the size and location of the fibroid(s). Most likely your doctor will suggest annual exams with your gynecologist to monitor your condition and verify that the symptoms develop or persist before suggesting options for treatment.

Drug Therapy Includes non-steroidal anti-inflammatory drugs, birth-control pills, and hormone therapy.

Myomectomy (removal of the fibroids) and **Hysterectomy** (removal of the uterus) are surgical procedures.

Uterine Fibroid Embolization (UFE) A non-surgical treatment causing the fibroids to shrink.

UFE

Uterine fibroid embolization is a fundamentally new and validated approach which blocks the arteries that supply the fibroids with blood. This is a minimally invasive procedure that only requires tiny skin nicks. The procedure does not require general anesthesia, but only mild sedation. Fibroid embolization is treated at a hospital under the care of an interventional radiologist, who specializes in minimally invasive procedures.

In this procedure, the interventional radiologist makes a small incision in the skin (less than a quarter of an inch) at the top of the leg to access the femoral artery, allowing the insertion of a tiny tube (catheter) into the artery. The catheter is then guided through the artery using the help of x-ray imaging.

When the catheter reaches the uterine artery, it can then be guided into the multiple vessels supplying the fibroids with blood. An arteriogram (images taken while radiographic dye is injected) provides a map of the blood supply to the uterus and fibroids. Slowly, the radiologist injects tiny synthetic or gelatin sponge particles—the size of grains of sand—into the vessels. These particles flow to the fibroid first and wedge between the vessels and the fibroid. After several minutes, these particles stem

the flow of blood to the fibroid. The *embolization* procedure continues until the blood flow into the vessel is completely blocked. It should be noticed that the particles used in embolization cannot travel to other parts of the body.

When the embolization is complete, another arteriogram is performed to confirm the results. The skin area where the catheter was inserted is cleaned, a bandage applied, and the fibroids begin to shrink as a result of the restricted blood supply. An overnight hospital stay is usually required. However, some women go home the same day, needing only 6-8 hours of bed rest to recover. Side effects include swelling, cramping, and fever. Complete recovery takes from one to two weeks.

Providing Options and Relief

Fibroid embolization has been available to women for decades, but is just now becoming more widely known as an alternative to hysterectomy for the treatment of uterine fibroids. For over twenty years, the procedure had been used by interventional radiologists to treat heavy bleeding in women after childbirth. Today, fibroid embolization is being performed in hospitals and medical centers across the world.

"For many women, having a non-surgical option for the treatment of fibroids is extremely important and re-assuring. The effectiveness of the procedure, coupled with the fast recovery time, are providing women with options and relief to a painful and challenging medical problem," says Dr. Liu. "I would encourage women to speak with their gynecologist about this course of treatment, especially if pain and excessive bleeding are issues."