

Uterine Fibroid Embolization– For Patients

What is fibroid?

Fibroid (also known as leiomyoma) a benign tumor that originates from the smooth muscle layer and connective tissue of the uterus.

What are the symptoms of fibroid?

The most common are:

1. Irregular and/or increase in menstrual bleeding, known as menorrhagia.
2. Infertility (inability to become pregnant).
3. Urinary symptoms such as frequent urination, a sense of urgency to urinate or, rarely, inability to urinate.
4. Constipation.
5. Lower abdominal pain.
6. Incidentally discovered pelvic mass.
7. Painful intercourse (dyspareunia)

What is Fibroid Embolization?

Uterine artery embolization or Uterine fibroid embolization (also known as UAE or UFE), blocks the blood flow to the fibroid tumor, killing it and causing symptoms to subside.

How does the procedure work?

The procedure involves inserting a catheter through the groin, maneuvering it through the uterine artery, and injecting the special tiny particles into the arteries that supply blood to the uterus and fibroids. As the fibroids die and begin to shrink, the uterus fully recovers.

How is the procedure performed?

UAE or UFE is an image-guided, minimally invasive procedure that uses a high-definition x-ray camera to guide a trained physician specialist, an Interventional Radiologist, to introduce a catheter into the uterine arteries to deliver the particles. The procedure is performed in an angiosuite (like a heart cath).

Will I be put to sleep (under anesthesia) during the procedure?

You may receive sedative medication or you may also receive general anesthesia.

What are the benefits?

- Uterine fibroid embolization, done under local anesthesia, is much less invasive than open surgery done to remove uterine fibroids or the whole uterus (known as hysterectomy).
- No surgical incision is needed. Only a small nick in the skin is required, that does not have to be stitched to be closed.
- Patients ordinarily can resume their usual activities weeks earlier than if they had a hysterectomy.

- Blood loss during uterine fibroid embolization is minimal; the recovery time is much shorter than for hysterectomy.
- Follow-up studies have shown that nearly 90 percent of women who have their fibroids treated by uterine fibroid embolization experience either significant or complete resolution of their fibroid-related symptoms. This is true for women with heavy bleeding and for those with bulk-related symptoms such as pelvic pain or pressure. On average, fibroids will shrink to half their original volume, which amounts to about a 20% reduction in their diameter.
- Follow-up studies over several years have shown that it is rare for treated fibroids to re-grow or for new fibroids to develop after uterine fibroid embolization. This is because all fibroids present in the uterus, even early-stage masses that may be too small to see on imaging studies, are treated during the procedure.
- Uterine fibroid embolization is a more permanent solution than other options such as, hormone therapy. When hormonal treatment is stopped the fibroid tumors usually grow back. Re-growth also has been a problem with laser treatment of uterine fibroids.

What are the risks?

- Any procedure that involves placement of a catheter inside a blood vessel carries certain risks. These risks include damage to the blood vessel, bruising or bleeding at the puncture site, and infection.
- When performed by an experienced interventional radiologist, the chance of any of these events occurring during uterine fibroid embolization is less than 1%.
- Any procedure where the skin is penetrated carries a risk of infection. The chance of infection requiring antibiotic treatment appears to be less than 1%.
- There is always a chance that an embolic agent can lodge in the wrong place and deprive normal tissue of its oxygen supply.
- An occasional patient may have an allergic reaction to the x-ray contrast material used during uterine fibroid embolization. These episodes range from mild itching to severe reactions that can affect a woman's breathing or blood pressure.
- Approximately two to three percent of women will pass small pieces of fibroid tissue after uterine fibroid embolization. This occurs when fibroid tissue located near the lining of the uterus dies and partially detaches. Women with this problem may require a procedure called D & C (dilatation and curettage) to be certain that all the material is removed so that bleeding and infection will not develop.
- In the majority of women undergoing uterine fibroid embolization, normal menstrual cycles resume after the procedure. However, in approximately 1-5% of women, menopause occurs after uterine fibroid embolization. This appears to occur more commonly in women who are older than 45 years.
- Although the goal of uterine fibroid embolization is to cure fibroid-related symptoms without surgery, some women may eventually need to have a hysterectomy because of infection or persistent symptoms. The likelihood of requiring hysterectomy after uterine fibroid embolization is low—less than 1%.

Will I be exposed to radiation?

Women are exposed to x-rays during uterine fibroid embolization, but exposure levels usually are well below those where adverse effects on the patient or future childbearing would be a concern.

What are the chances of getting pregnant after having this procedure?

The question of whether uterine fibroid embolization impacts fertility has not yet been answered, although a number of healthy pregnancies have been documented in women who have had the procedure. Because of this uncertainty, physicians may

recommend that a woman who wishes to have more children consider surgical removal of the individual tumors rather than uterine fibroid embolization. If this is not possible, then UFE may still be the best option. It is not possible to predict whether the uterine wall is in any way weakened by UFE, which might pose a problem during delivery. Therefore, the current recommendation is to use contraception for six months after the procedure and to undergo a Cesarean section during delivery rather than to risk rupturing the wall of the uterus during the contractions of labor.

What are the limitations of Uterine Fibroid Embolization (UFE)?

Uterine fibroid embolization should not be performed in women who have no symptoms from their fibroid tumors, when cancer is a possibility, or when there is inflammation or infection in the pelvis. Uterine fibroid embolization also should be avoided in women who are pregnant or in women whose kidneys are not working properly (a condition known as renal insufficiency). A woman who is very allergic to contrast material (which contains iodine) should be offered a different treatment option. Also, when a single fibroid is very large (>8-10 cm) or the uterus is as large as or larger than a 5 month pregnancy, the procedure is less effective. Multiple fibroids do not decrease the effectiveness of the procedure.

When will I be able to return to work?

You may return to work in less than 2 weeks, but no sooner than 1 week. We will give you a work excuse for 2 weeks and let you decide if you want to return to work after one week of recovery. Most of our patients do stay out of work for the full 2 weeks.

What will I experience during and immediately after the procedure?

- Devices to monitor your heart rate and blood pressure will be attached to your body.
- You will feel a slight pin prick when the needle is inserted into your vein for the intravenous line (IV) and when the local anesthetic is injected.
- If the case is done with sedation, the intravenous (IV) sedative will make you feel relaxed and sleepy. You may or may not remain awake, depending on how deeply you are sedated.
- You may feel slight pressure when the catheter is inserted but no serious discomfort.
- As the contrast material passes through your body, you may get a warm feeling.
- While you are in the hospital, your pain will be well-controlled with a narcotic.
- After staying overnight at the hospital, you should be able to return home the day after the procedure.
- You may experience pelvic cramps for several days after your UFE, and possibly mild nausea and low-grade fever as well. The cramps are most severe during the first 24 hours after the procedure and will improve rapidly over the next several days. While in the hospital, the discomfort usually is well-controlled with pain medication delivered through your IV.
- Once you return home, you will be given prescriptions for pain and other medications to be taken by mouth. You should be able to return to your normal activities within one to two weeks after the procedure.
- Afterward, it is common for menstrual bleeding to be much less during the first cycle and gradually increase to a new level that is usually greatly improved as compared to before the procedure. Occasionally you may miss a cycle or two or even rarely stop having periods altogether. Relief of bulk-related pressure symptoms usually takes two to three weeks to be noticeable and over a period of months the fibroids to continue to shrink and soften. By six months, the process has usually finished and the amount of symptom improvement will stabilize.

What are the instructions after the procedure?

- Avoid heavy lifting or strenuous activity for the next 7 days after the procedure to allow the arterial puncture site to heal. Avoid hot tubs or tub bathing for the next week. No lifting of objects heavier than a gallon of milk for next 72 hours after the procedure. We highly encourage you to walk as much as you can tolerate in order to heal faster and to decrease your chances for a blood clot in your leg or lungs.
- If your groin we accessed begins to hurt, swell, or bleed, then hold pressure over the groin for 20 minutes. If it is not bleeding any longer, call us immediately for further instructions. If it continues to bleed or you have any leg symptoms such as pain or cold toes, call 911. When in doubt, always call 911.
- You may increase your activities as tolerated over the next 2 week.
- Ibuprofen over-the-counter comes in 200 mg pill/tablet and you can take up to 3 or 4 of those for a total dose of 600-800 mg orally every 6 hours with a small snack or meal. If you are also taking acetaminophen products (such as Tylenol), make sure that the pain medicine does not already have acetaminophen in it. Hold any acetaminophen products for 6 hours when taking a pain pill that contains acetaminophen.
- No driving if you are drowsy or until 8 hours after taking the pain pill(s). Do not make any major life or legal decisions for the first 48 hours after the procedure and until you are not taking the pain medicine.
- You may take Zofran or Phenergan orally for nausea/vomiting every 6-8 hours as needed. Zofran comes in a tablet you can swallow or it comes in a dissolvable tablet that will melt in your mouth. Phenergan will make you drowsy, so avoid driving until 8 hours after taking Phenergan, and you are no longer drowsy. Zofran alone should not make you drowsy.
- Resume your medications prescribed by your physician. If you have been given any new prescriptions, fill them immediately and begin taking them as directed.
- Any diabetic patients taking Metformin products will receive special instructions after the procedure. Metformin products should NOT be taken for the first 48 hours after the procedure.
- Call us if you have fever greater than 101, if you have heavier vaginal/female discharge or bleeding, or if you have any foul discharge. Cramping is expected, but should be relieved with the pain medications prescribed. If not, or if you have any others concerns, call us.
- You can expect the symptoms from your fibroid(s) to typically begin improving by the third menstrual cycle after the procedure. However, they may improve up to 12 to 24 months.
- You must use some form of birth control protection for the next 6 months. At the end of the 6 month period, you may discontinue birth control if you wish to attempt pregnancy.
- Do NOT use tampons or have sexual intercourse for the next 6 weeks.
- You will have an appointment for a follow-up with us in 6 months. We will contact you about it in the months to come.
- You may resume your normal diet upon discharge. DRINK plenty of water.
- Follow-up with you OB-GYN physician as routinely scheduled.

If I have other questions, who do I contact?

For further questions or concerns about UAE/UFE procedure, please contact Interventional Radiology at 205-975-4UFE, 205-975-4833, 205-934-0152, 205-934-7245, 205-975-4850.