

Uterine Fibroid Embolization

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Nights and Weekends
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Before the Procedure

- Stop all aspirin and vitamin E for 5 days before the procedure.
- Please have nothing to eat or drink after midnight of the night before the procedure.
- You should take any medications you usually take the morning of surgery, but use only a very small amount of water to swallow them.
- **Routine blood tests** will be performed the week before your procedure to evaluate for anemia, kidney function and the blood chemicals that support clotting.

Last-minute steps before the UFE procedure include:

- An IV started in the arm or forearm and **antibiotics** given prophylactically (Ancef, Clindamycin or Penicillin). The purpose of this step is to lower the possibility of infection as a result of the procedure. The IV will remain in place overnight.
- An indwelling **Foley catheter** will be inserted in the urinary bladder so that a distended bladder will not complicate visualization or distort the anatomy. It remains in place overnight.

Steps of the UFE Procedure

1. After an appropriate prepping and draping of the groin area, the radiologist will give local anesthesia, make a tiny incision in the skin of the right groin and enter an artery with a needle, through which a small catheter can enter the vessel. The needle is withdrawn during the rest of the procedure.
2. Through the use of an X-ray machine, the radiologist can see the pelvic vessels after injecting the contrast dye, as if they were a road map. The catheter is moved along the femoral artery, manipulated into the iliac artery and then into the uterine artery on the left side. This will be repeated on the right side.
3. When the blood supply of the fibroid is visualized, different blocking particles — consisting of particles the size of tiny grains of sand — are injected until the blood flow in the fibroid vessels shows near complete stasis.
4. The catheter is withdrawn and re-manipulated down the road map of the pelvic blood vessels to the right uterine artery, where the injection process is repeated.

When the radiologist is certain the blood supply to both sides is stopped, the catheter is withdrawn. Pressure is applied to the outside of the femoral vessel or a device is used to stop the bleeding. A small dressing is applied.

The Post-operative Time

Duration of time in the ambulatory unit

Our patients remain in the hospital up to 23 hours to be certain they are comfortable and free of complications. Though some can go home earlier, we believe in making use of the maximum time allowed to ensure the patients receive excellent quality of care.

Medications recommended at home

- Resume your current medications
- **Ibuprofen** (Motrin, Advil) 600 mg should be taken 3 times a day for 5 days. We believe that this is a very important step in post-UFE care, not only for pain relief, but as an anti-inflammatory medication to decrease the amount of swelling and tissue reaction.
 - Take this medication with food or an antacid. It has a tendency to irritate the stomach.
 - Notice the strength of the preparation you purchased. Commonly over-the-counter ibuprofen comes in 200 mg capsules or tablets. Three (3) tablets will be needed to reach the recommended 600 mg per dose amount.
 - Take the last dose of the day just before going to sleep.
- **Percocet:** Take 1 tablet every 6 hours, but only as needed, in addition to ibuprofen. Chemically, Percocet is a combination of oxycodone 5 mg (a chemical relative of Codeine) and acetaminophen 325 mg (the active ingredient in Tylenol). This is a controlled drug for which you will need a prescription before leaving the hospital. Though it is a very effective pain reliever, like most narcotics it should not be taken over long periods of time. Commonly no longer than five days is recommended.

OR

- **Lortab:** Take 1 tablet every 6 hours, but only as needed (in addition to Ibuprofen). Chemically, Lortab is a combination of Hydrocodone 7.5 mg (a chemical relative of Codeine), and Acetaminophen 500 mg (the active ingredient in Tylenol.) This is a controlled drug for which you will need a prescription before leaving the hospital. Though it is a very effective pain reliever, like most narcotics, it should not be taken over long periods of time. Commonly no longer than 5 days is recommended.
- **Take all pain medications listed above with food to decrease any possibility of stomach irritation. You need to drink at least 8 glasses of water daily to help prevent constipation.**
 - Colace (100 mg capsules of docusate sodium) or other stool softeners are sold generically in many pharmacies. Take 200 mg (2 capsules) at bedtime each night for 7 days and then, if needed, continue for an additional week using 100 mg each night at bedtime. It is a stool softener, and should be used once a day, especially while taking Percocet. This avoids the common side effects of pain medications, such as constipation. Other reasons for increased constipation after UFE are related to a combination of decreased physical activity and short-term alteration of usual diet. You may also take Milk of Magnesia or other over-the-counter anti-gas medications.
- **Levaquin** (250 mg tablets of levofloxacin) is an antibiotic used to prevent infection. Take 250 mg (1 tablet) of Levaquin once daily for 7 days. Please make sure to continue the medication for the 7 days as prescribed.

Diet and Activity

- Increase your **fluids** for the first week to approximately 8 to 10 glasses a day. This is roughly the amount of a large 2-liter bottle of Coke. Water, juice or other liquids are all acceptable to satisfy the requirement. The increased fluids will help to flush the contrast, as well as medication, out of your system. Some of the pain medications prescribed are known to cause constipation, so increasing your fluid intake can help prevent it.
- Resume your usual diet as tolerated. It may take several days for your normal appetite to return. While taking the pain medication, you are encouraged to increase the fiber in your diet to help decrease any constipation.

Activity after the procedure

- Upon discharge, walking as much as tolerated is encouraged. During the daytime hours, you should be out of bed and walk around your house at least every four hours. Walking is important to promote circulation to your legs while you are recovering from the procedure.
- Avoid tub baths or hot tubs for one week. Showers or sponge baths are alright at any time.
- We do not recommend driving your automobile in the first 5 days after the procedure, especially while taking pain medications.
- **Do not** take aspirin or products containing aspirin or Vitamin E for 5 days after the procedure. The ibuprofen mentioned above does not have the same effect as aspirin on blood clotting and is all right to use.
- For the first week, avoid any strenuous activity, lifting or moving heavy objects over 10 pounds. Do not climb stairs when it could be avoided. Do not stand in place for long periods of time, (such as during cooking). Do not assume a squatting position.
- For the first month after the procedure, eliminate heavy exercise routines or athletic interests.
- Sexual relations should be avoided for approximately 4 to 6 weeks.
- For 3 months, do not use tampons; substitute pads for sanitary purposes.
- While you are home recovering, you should elevate your legs on two pillows while lying in bed.

Care of the Groin Puncture Site

- Change/remove the bandage at the groin puncture site. It is best to remove bandage in the shower because the water loosens the bandage and makes it easier to remove.
- **For active bleeding (new bright red blood) at the groin puncture site**, you should do the following:
 - Lie down, place your fingers on the groin, slightly above the puncture site and hold firm pressure for 15 minutes; stop activity at this time and keep your leg straight. After 15 minutes, if you are unable to stop the bleeding with firm pressure applied to the puncture site, **call 911 immediately**.
- **If you notice oozing of blood at the puncture site**, apply pressure, reinforce with a small dressing or bandage and decrease activity level for several hours. If it is still oozing after a few hours, please call (804) 628-2340 or (804) 628-7651 during working hours (Monday-Friday, 8:30 a.m.-5 p.m.), or call (804) 828-0951 after hours and ask to speak to the radiology resident on call.

Follow-up Examinations

- You will be contacted by a member of our medical staff in the first few days after discharge. An appointment will be given for a check-up within 7 to 10 days after the procedure. This should occur sooner if there are symptoms which seem unusual or if there is fever or increasing pain.
- Follow-up ultrasounds should be done 3 months and one year after the procedure. The purpose is to document exactly what change in fibroid size has occurred.
- You should continue your normal gynecologic care with your OB/GYN physician; this includes a yearly pelvic exam and Pap smear.

Interpreting Symptoms That May Occur After the Procedure

- **Fever:** You may have a low-grade fever — typically in the range of 99-100 degrees Fahrenheit — following the procedure. The fever is a side effect of the fibroids dying. This can be the so-called “Post-Embolization Syndrome” but it is difficult for the patient to tell it from an infection that needs antibiotic treatment. Any fever over 101.5 degrees, or any persistent fever should be evaluated by our medical team.
- **Vaginal discharge:** A brown or reddish-brown vaginal discharge or spotting is not uncommon after the procedure. This may start shortly after the procedure. Occasionally even tissue can be seen. This is nothing to worry about, and merely indicates the elimination of breakdown products from degenerating fibroids. You may use a sanitary napkin, but please refrain from using tampons for 3 months. Your first couple of menstrual cycles may be irregular following the embolization and it may take two or three cycles before an improvement in your abnormal bleeding is noted.
- **Heavy periods:** For a few cycles after embolization, there may be a temporary increase in menstrual flow. This will not be permanent and will subside without further treatment.
- **Loss of periods (amenorrhea):** This has been reported in about 1 percent of all cases. It is of note that it most commonly occurs in patients near menopause.

Can there ever be more serious complications from this procedure?

In the experience of most interventional radiologists, serious complications are rare.

Allergies to Drugs and Solutions

The medications used during embolization procedures are not noted for any usually high incidence of allergic reactions. But as in any procedure, there is the occasional patient who can have a reaction to any medication used. Generally this can be avoided by a careful history of the patient’s allergies, but it is always possible that new allergies can occur. The incidence of very serious allergy appears to be 0.006 percent.

Major Complications

Though we have not experienced such a complication, uncommon cases of severe endometritis requiring hysterectomy occurring 2 to 3 weeks after the embolization are recorded in the world’s literature. As the number of procedures done increase daily, even better information on the actual incidence will be forthcoming.

Advantages of the Procedure

It is clear that no one treatment fits all. There are issues in all cases that make each case unique and that must be considered in the decision for or against UFE. However, in our experience, these are the advantages that UFE offers when the option is being considered by the patient and her gynecologist.

- Emotionally, financially and physically, embolization can have an overall advantage over other procedures for the patient, as the uterus is not removed.
- If the presenting complaint was excess vaginal bleeding, 87 percent to 90 percent of cases experience resolution within 3 to 6 months.
- Treats all fibroids simultaneously.
- Virtually no adhesion formation has been found.
- There has been no observed recurrent growth of treated fibroids.

“The best patient care results are achieved when interventional radiologists and gynecologists work together to develop a treatment plan of care for each woman individually.”