UW Medicine

Interventional Radiology:

Uterine Fibroid Embolization (UFE)

How to prepare and what to expect

This handout explains a uterine fibroid embolization procedure, how it is used, and what results to expect.

What are uterine fibroids?

Fibroids are *benign* tumors. Benign means that they are **not** cancer.

Uterine fibroids occur in the muscle tissue of the wall of the uterus. They are not harmful, but they may be painful. They can also cause heavy menstrual bleeding or pressure on the bladder and bowel.

What is uterine fibroid embolization?

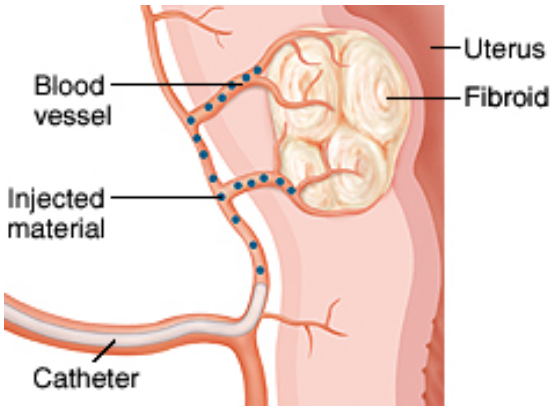
In *embolization*, a doctor injects a material into a blood vessel to block blood flow. *Uterine fibroid embolization* (UFE) is a way to treat fibroids of the uterus without surgery.

UFE uses X-rays to guide a *catheter* (tiny tube) into the arteries that feed blood to the fibroid(s). Small particles are then injected to block blood flow.

UFE is done by an *interventional radiologist*, a doctor with special training to do this procedure. It is much easier on the body than *open surgery*, which uses a scalpel to make an incision in the body.

How does UFE work?

With its blood supply cut off, the fibroid no longer receives oxygen and nutrients. The fibroid(s) stops growing and begins to shrink. Most times, this eases symptoms.



In UFE, material is injected into blood vessels to block blood flow to the fibroid.

What are the risks of UFE?

We do not know how UFE affects fertility. Because of this, we advise you to have

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UFE **only** if you no longer wish to become pregnant. Talk with your doctor about the benefits and risks of your having UFE.

How is UFE used?

UFE is most often used to treat symptoms caused by fibroid tumors. It may be used instead of a *hysterectomy* to treat uterine fibroids. A hysterectomy is open surgery that removes the uterus.

The methods used in UFE can also be used to stop severe bleeding in the uterus. This bleeding may occur after childbirth or be caused by malignant tumors.

How do I prepare?

If you want to have UFE, talk with your gynecologist. If your doctor believes that your symptoms may be caused by fibroids, they will do *magnetic resonance imaging* (MRI) or an ultrasound of your uterus to assess the size and number of fibroids.

If we rule out other causes of your symptoms, you may be referred for a clinic visit with an *interventional radiologist* who is trained in UFE. During your visit, this specialist will tell you how to prepare for the procedure.

Plan to be off work for 1 to 2 weeks after the procedure. You may also need some help with household chores during this time.

What can I expect after UFE?

Most patients will:

- Stay overnight in the hospital for pain control and monitoring.
  - While you are in the hospital, you may be able to use *patient-controlled analgesia* (PCA). This device allows you to control when you receive pain medicine.
  - You will also take pain and anti-inflammatory medicines by mouth. You will be given these medicines to use at home when you are discharged the next day.
- Have pelvic cramps for several days after UFE. Cramps are most severe during the first 24 hours after the procedure. They rapidly get better over the next several days.
- Have mild nausea and a low-grade fever for several days after the procedure.
- Recover from the effects of UFE in 1 to 2 weeks after the procedure, and can then return to normal activities. Some women find that it takes longer to fully recover.

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- Find that it takes 2 to 3 months for the fibroids to shrink enough so that symptoms such as pain and pressure improve. Heavy bleeding usually lessens during the first menstrual cycle after the procedure.

Before Your Procedure

Arrival Time

If you are an *outpatient* (not staying in the hospital), a nurse coordinator will call you the afternoon before your procedure. If your procedure is on a Monday, the nurse will call you the Friday before. The nurse will:

- Tell you when to arrive at the hospital
- Remind you what to do on the morning of your procedure
- Answer any questions you have

Interpreter Services

If you do not understand English well enough to understand these instructions or the details of the procedure, tell us **right away**. We will arrange for a hospital interpreter to help you. This service is free. **A family member or friend may not interpret for you.**

Allergies

If you have had an allergy or bad reaction to *contrast* (X-ray dye) in the past, please call our Interventional Radiology Nurse Coordinator (see numbers on the last page). You may need medicine for this allergy before the procedure.

Blood Test

You most likely will need a blood test done within the 14 days before your procedure. Sometimes, we do this when you arrive for your procedure. We will tell you if we need to draw blood before that day.

Blood-thinning Medicines

If you take a blood thinner such as Lovenox (enoxaparin), Coumadin (warfarin), or Plavix (clopidogrel), you may need to stop taking it for 1 to 10 days before the procedure. The length of time depends on which medicine you are taking. If you have not been told what to do, talk with your provider or the clinic that prescribes the medicine. Ask when to stop taking this medicine.

IMPORTANT: If you have ever had a heart stent, a prosthetic heart valve, or a pulmonary embolism, or if you have atrial fibrillation with a history of a stroke, you **must** contact the provider who prescribes your blood-thinning medicine. Tell them that you are having a medical procedure. Ask what to do about your dose before your procedure.

Diabetes Medicines

If you have diabetes and take insulin or metformin (Glucophage), we will give you instructions about holding or adjusting your dose for the day of your procedure.

Sedation

Before your procedure, you will be given a *sedative* (medicine to make you relax) through an *intravenous line* (IV) in one of your arm veins. You will stay awake, but feel sleepy. This is called *moderate sedation*. You will still feel sleepy for a while after the procedure.

For some people, using moderate sedation is not safe. If this is true for you, you will need general *anesthesia* (medicine to make you sleep during the procedure).

Let us know **right away** if you:

- Have needed anesthesia for basic procedures in the past
- Have sleep apnea or chronic breathing problems (you might use a CPAP or BiPAP device while sleeping)
- Use high doses of an opioid pain medicine
- Have severe heart, lung, or kidney disease
- Cannot lie flat for about 1 hour because of back or breathing problems
- Have a hard time lying still during medical procedures
- Weigh more than 300 pounds (136 kilograms)

If you have any of these health issues, we may need to give you different medicines. Instead of a sedative, you might receive:

- Only a *local anesthetic* (numbing medicine), such as lidocaine.
- A local anesthetic and a single pain or anxiety medicine. This is called *minimal sedation*.
- *General anesthesia* (medicine to make you sleep). This medicine is given by an anesthesia provider.

Day Before Your Procedure

- Drink lots of fluids the day before your procedure. You may eat as usual.
- If you are an *outpatient* (not staying overnight in the hospital):
  - Plan for a responsible adult to drive you home after your procedure. **You may NOT drive yourself home or take a bus, taxi, or shuttle by yourself.** You may take a bus, taxi, or shuttle **if** you have a responsible adult to ride with you.

IMPORTANT: Your procedure will be rescheduled if you do not have a responsible adult to escort you home.

- Also plan for a responsible adult to stay with you overnight.

Procedure Day

At Home

- Take your usual medicines on the day of the procedure, unless the doctor or a nurse tells you to hold them. (Some patients may need to stop taking their blood-thinning or other prescription medicines.)
- Do **not** take vitamins or other supplements. They can upset an empty stomach.
- Starting **6 hours** before your procedure, **stop eating solid foods.** You may have only *clear liquids* (liquid you can see through), such as water, broth, cranberry juice, or weak tea.
- Starting **2 hours** before your procedure, take **nothing** at all by mouth.
- If you must take medicines, take them with **only** a sip of water.
- Bring with you a list of all the medicines you take.
- Plan to spend most of the day in the hospital.

At the Hospital

- You may have been told to go to Outpatient Lab for a blood draw. Do this before you check in. The lab is on the 3rd floor of the hospital, next to Outpatient Pharmacy, near the Cascade elevators.
- Unless you are told otherwise, check in at Admitting on the 2nd floor, next to Radiology. Take the Pacific elevator to the 2nd floor. Admitting is on the right side of Radiology Department.
- After checking in, you will be told to go to Radiology Reception.
- If there is a delay in starting your procedure, it is usually because we need to treat other people with unexpected and urgent problems. Thank you for your patience if this occurs.
- When we are ready to start your procedure, a staff member will:
  - Take you to a pre-procedure area
  - Give you a hospital gown to put on
  - Give you a bag for your belongings
- While you are in the pre-procedure area:
  - Your family or a friend can be with you.

  - A nurse will ask you some health questions, take your vital signs (such as heart rate), place an *intravenous* (IV) tube in your arm, and go over what to expect.
  - A radiologist or physician assistant will talk with you about the risk and benefits of the procedure. They will ask you to sign a consent form, if you have not already signed one.
  - If you are scheduled to have general anesthesia, the anesthesia care provider will meet you and go over your health history.
  - You will be able to ask any questions you have.
- The nurse will then take you to the Radiology suite. This nurse will give you the sedative and will monitor you during and after the procedure.

What happens during the procedure?

- If you need an interpreter, they will be in the room or will be able to talk with you and hear you through an intercom.
- You will lie flat on your back on an X-ray table.
- X-rays will be taken during the procedure to help your doctor see your uterus and the fibroid(s).
- We will place wires on your body to help us monitor your heart rate.
- You will have a cuff around your arm. It will inflate from time to time to check your blood pressure.
- Prongs in your nose will give you oxygen. A probe on one of your fingers will show us how well you are breathing the oxygen.
- For your safety, the entire medical team will ask you to confirm your name, go over your allergies, and explain what we plan to do. We do this for every procedure and every patient.
- A radiology technologist will use a special soap to clean your skin around the puncture site. The technologist may need to shave some hair in the area where the doctor will be working.
- Tell the technologist if you have any allergies.
- Before the catheter is inserted into your abdomen, the doctor will inject a local *anesthetic* (numbing medicine). You will feel a sting for about 10 to 15 seconds. After that, the area should be numb and you should feel only minor discomfort.
- Some wires and tubes (*catheters*) will be inserted into your artery. Your doctor will guide them to the uterine arteries that supply blood to the fibroid.
- We will inject contrast through the catheters during the procedure. Contrast helps images show more clearly on the X-rays.

- Your doctor will choose the blood vessels to be *embolized* (blocked off) and inject particles into them. This continues until all blood flow to the fibroid(s) is blocked.
- After the procedure is done, we will remove the catheter. Your artery will be closed, either with a special device or by hand.
  - If a device is used, you must lie flat on your back and not move for 2 to 3 hours after the procedure.
  - If the radiologist cannot close the artery with a device, someone will apply pressure to the site for 15 to 20 minutes to stop bleeding. If this occurs, you will have to lie flat on your back and not move for 6 hours.

What happens after the procedure?

- You will be moved to a room on the short-stay unit on the hospital.
  - **If you had general anesthesia:** You will be watched for a short time in the Radiology department or recovery room before going to the short-stay unit.
- Once you are settled in to your room:
  - Your family member or friend will be able to be with you.
  - You will need to rest flat on your back for 2 to 6 hours to allow your groin puncture site to heal.
  - You will be able to eat and drink.
- Before you get up to walk, we will assess you to make sure you can walk safely. A nurse or patient care technician (PCT) will help you get out of bed. Most times, we will place a gait belt around your waist for extra safety.
- You will stay in this room overnight.
- You will be able to go home the next day when:
  - You can eat, drink, and use the restroom
  - Your nausea and pain are under control
  - Your vital signs are stable
  - You can walk normally
  - You have a responsible driver to take you home
  - You have a responsible person to stay with you at home overnight

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Self-care

For 24 Hours

The medicine that you were given to make you sleepy will stay in your body for several hours. It could affect your judgment. You may also be lightheaded or feel dizzy.

Because of this, for 24 hours:

- Do **not** drive a car.
- Do **not** use machines or power tools.
- Do **not** drink alcohol.
- Do **not** take medicines such as tranquilizers or sleeping pills, unless your doctor prescribed them.
- Do **not** make important decisions or sign legal documents.
- Do **not** be responsible for children, pets, or an adult who needs care.

To help your recovery:

- Do only light activities and get plenty of rest.
- Keep the groin puncture site covered with the dressing. Make sure it stays clean and dry.
- A responsible adult should stay with you overnight.
- Eat as usual.
- Drink lots of fluids.
- Resume taking your medicines as soon as you start to eat. Take **only** the medicines that your doctors prescribed or approved.

For 48 to 72 Hours

- Do not lift anything that weighs more than 5 to 10 pounds (a gallon of milk weighs almost 9 pounds).
- Do only moderate activities. This will allow your puncture site to heal.
- Avoid hard work and any exercise that makes you breathe harder or makes your heart beat faster.

Dressing Care

- After 24 hours, remove the dressing. Check the puncture site for any signs listed under “When to Call” on page 9.
- You may shower after 24 hours. Do **not** scrub the puncture site. Allow warm soapy water to gently run over the site.
- After showering, gently pat the site dry with a clean towel.

- Do **not** apply lotion, ointment, or powder to the site.
- You may apply a new Band-Aid.
- If you apply a new Band-Aid, change it every day for the next few days. Always check the site when you remove the Band-Aid.
- Do not take a bath, sit in a hot tub, go swimming, or allow your puncture site to be covered with water until it is fully healed.
- You may have some slight discomfort or bruising at the site.
- You can expect to have spotting or a brown discharge from your vagina for days to weeks after the procedure.

When to Call

Call one of the numbers listed on page 10 under "Who to Call" if you have any of these symptoms:

- Bleeding from the groin puncture site that does not stop after you apply pressure at the site for 15 minutes
- Swelling and pain at the puncture site
- A lot of bruising around the puncture site
- Signs of infection at the puncture site: redness, warmth, tenderness, or discharge that smells bad
- Fever higher than 101°F (38.3°C)
- Chills
- A new rash that does not go away
- Abdominal pain and cramping that does not go away when you take the pain medicines your doctor prescribed
- A lot of bleeding or discharge from your vagina, or discharge that smells bad

Urgent Care

Call 911 and go to the nearest emergency room if you have any of these symptoms:

- Chest pain
- Trouble breathing
- Your leg on the side where the puncture was done turns cold or blue
- Slurred speech
- Balance problems or trouble using your arms or legs

- Severe abdominal pain that will not go away
- Vaginal bleeding that seems severe

Who to Call

- Weekdays from 8 a.m. to 4:30 p.m., call the Interventional Radiology Nurse Coordinator at 206.598.6209.
- After hours and on weekends or holidays, call 206.598.6190 and ask to page the Interventional Radiology Fellow on call.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- ❑ UWMC Imaging Services: 206.598.6200
- ❑ UWMC Interventional Radiography: 206.598.6209

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