

Prostate Artery Embolization

Prostate artery embolization (PAE) is a treatment for an enlarged prostate. This treatment slows the blood flow to the prostate. Over time, this causes the prostate to get smaller. This will help with some of the bladder symptoms of benign prostatic hyperplasia (BPH).

If you have any questions,
talk with your physician
or nurse.

Before the procedure

You will first need to meet with the urologist in the urology clinic to see if this treatment may help you. If you choose to have this procedure, you will need to contact the patient care coordinator at 312.695.9327 (TTY: 711).

They will send you an email with instructions to do a survey and send us your medical records and imaging results. The physician will review your records and survey. You will have an in-person or phone consultation with the physician to talk about your needs. If you and your physician agree to the procedure, you can schedule the PAE.

You will need to take some over-the-counter medications for 2 days before the procedure. These will help your recovery later. Follow your physician's instructions for taking the medications.

- › Omeprazole (Prilosec OTC®): This reduces the acid in your stomach and helps protect your stomach from bleeding.
- › Naproxen (Aleve®): This helps reduce pain and inflammation.

You should not eat or drink anything after midnight on the night before your procedure.

Day of the procedure

On the day of the procedure, you will come to the Interventional Radiology Department on the 4th floor of Feinberg Pavilion at 251 East Huron Street.

Patients and visitors can park in the garage at 222 East Huron Street, across from Feinberg and Galter pavilions. For a discounted rate, bring your parking ticket with you. You can validate your ticket at the Customer Service Desks on the 1st and 2nd floor of Feinberg and Galter pavilions and the 1st floor of Prentice Women's Hospital.

Be sure to bring:

- › A list of your allergies
- › A list of all your current medications (prescription, over-the-counter and herbal) and the last time you took them
- › Your photo ID
- › Medical insurance information and card
- › Medicare card (Medicare patients)

Please leave all valuables, such as jewelry, credit cards and money at home.

After you check in with the receptionist on the 4th floor, you will meet with staff who will bring you to the prep and recovery area. They will review your health history and medications. You will have a short physical exam. They will review the procedure and type of sedation that they will use. You will also have a chance to ask questions. They will give you a consent form to sign.

Once you change into a hospital gown, the care team will place an IV (into the vein) line in your arm or hand. You will get fluids and medication through the IV during the procedure. We will give you an antibiotic through the IV to prevent infection.

Before the procedure, the nurse will ask you use the restroom to empty your bladder. The nurse will then use a bladder scanner (ultrasound device) to see how much urine is left in your bladder. They will put an external condom catheter on you and attach it to a drainage bag to collect urine. Sometimes, you may get an indwelling urinary catheter (Foley) instead, if your physician decides that you need it. If so, you will keep the indwelling urinary catheter for 4 weeks and the urologist will take it out at an office visit.

Visitors

The care team will give you medication during the procedure that will make you sleepy, so it is important to have a responsible adult take you home. There is a no-visitor policy for outpatients in the prep area. We can share information about your progress with your significant other through text messaging. You may have 1 adult with you in the recovery area, if you wish. When you are ready, the person taking you home can meet you at the Feinberg entrance at 251 East Huron Street or the 4th floor waiting room.


During the procedure

A special X-ray machine will take pictures that guide the physician during the procedure. (Figure 1). You will be lying flat on the table. A nurse, technician and physician will all be in the room with you during your procedure.

Figure 1



The care team will check your heart rhythm and blood pressure. They will give you medication through the IV to relax you. They will then shave your groin area, clean it with a special soap and cover it. They will inject medication into the skin to numb it. They will insert a small arterial catheter through the artery in your groin to the prostate. You may feel pressure, but you should not feel any pain.



Once the arterial catheter is in the prostate, you will have a computed tomography (CT) angiogram. This test will show the blood vessels leading to the prostate. The physician will put small beads in the artery to the prostate. Then, they will remove the arterial catheter in your groin.

The physician may stitch the small wound left by the arterial catheter. If so, the stitches will slowly dissolve on their own. You will need to lie flat or at no more than a 30-degree angle with your leg straight for 1 to 2 hours. This allows the wound to close to stop bleeding.

If you do not have stitches, the care team will put pressure on the site for 20 minutes or until there is no bleeding. You will need to lie flat in bed with your leg straight for 4 hours.

After the procedure

You will be in the recovery area for 2 to 3 hours. The care team will remove the condom catheter. Before going home, you must be able to urinate freely into a urinal while standing in the restroom. We will use a bladder scanner (small ultrasound device) to measure the amount of urine left in your bladder.

Before you leave the hospital, you will get a prescription for an antibiotic. You will take the antibiotic for 7 days. You will take a steroid medication and start taking the Aleve and Prilosec again for 10 days, unless your physician tells you otherwise. Your physician or nurse will explain these medications to you.

You will need to follow up with your urologist 6 months after the procedure. At that time, the physician will decide what follow-up testing and future office visits you will need.

If you went home with an indwelling urinary catheter, you will have a visit with the urologist 4 weeks after the procedure. They will order lab work to test for a urinary tract infection before they remove the catheter. They will make sure you can fully empty your bladder after the catheter is out.

At home

Activity

Full recovery usually takes 5 to 10 days.

On the day of discharge:

- › Limit your activities and get plenty of rest.
- › Do not drive for 24 hours.
- › You may start your normal activities the day after you leave the hospital.
- › Do not do physical exertion or heavy lifting (more than 10 pounds) for the next 10 days.
- › You may shower after 24 hours. Do not bathe in a tub or go swimming for 10 days.

Slowly increase your physical activity. Depending on your work and how physically demanding it is, you may return to work.

Check your temperature each day, or if you feel warmer than usual.

What to expect

Drink lots of fluids throughout the day and evening of your procedure. This will help flush the dye out of your system and reduce inflammation. Drink fluids until your urine is pale yellow. You can expect to urinate every 15 to 30 minutes for 1 to 3 days. You will need to urinate less often after 24 to 48 hours.

When to call the physician

Contact your physician if you have:

- › A temperature more than 101.5 degrees F for more than 1 day
- › Pain or cramping in the abdomen that does not get better with pain medication
- › Severe nausea or vomiting
- › Bleeding at the puncture site
- › Any changes in the groin site

Find medical attention right away if you cannot urinate or if you are only dribbling urine.

Wound healing

The healing puncture site should stay soft and dry. Please tell your physician if you notice any:

- › Pain at the groin site
- › Redness or red streaks around the skin wound
- › Drainage from the site
- › Calf tenderness or pain
- › Numbness or tingling in the foot, thigh or leg
- › Swelling of the ankle and/or foot
- › More bruising extending to the thigh, over the buttock and/or groin
- › Color change and/or coolness of the leg or foot

Bleeding

If you see a small bit of bleeding or oozing from the puncture site, do the following:

- › Lie flat right away.
- › Put hard pressure just above the puncture site for 20 minutes. You may use a clean cloth or tissue to apply pressure. If possible, have another person put pressure.
- › After 20 minutes, remove pressure. The wound should be dry and flat without bleeding. Cover the wound with a bandage. Call your physician right away.

If the bleeding does not stop, go to the nearest emergency department or call 911.

Arterial bleeding

Arterial bleeding happens when the puncture in the artery has reopened and there is more bleeding. The following signs could mean there is arterial bleeding:

- › Fast, increased swelling of the area around the wound, which may be pulsating
- › Continuous blood coming from the wound
- › A jet of blood pumps from the puncture wound

If you see any of these signs, immediately apply hard pressure above the puncture site and call 911.



Contact numbers

If you have questions or concerns, call the clinical care coordinator for PAE at 312.695.9327 (TTY: 711).

If you cannot reach the coordinator, call the Interventional Radiology Department at 312.926.5200 and ask to speak with a nurse.

On nights and weekends, call 312.926.5200 and ask them to page the interventional radiology fellow on call.

For more information about Northwestern Medicine, please visit our website at [nm.org](https://www.nm.org).