Prostate Artery Embolization (PAE)

PAE or Prostate Artery Embolization is a treatment for an enlarged prostate. This treatment slows the blood flow to the prostate. Over time, this causes the prostate to shrink in size. This will relieve some of the bladder symptoms of benign prostatic hyperplasia (BPH).

If you have any questions, ask your physician or nurse.

Before the procedure

First you will need to meet with the physician in the urology clinic to see if this treatment may help you. The physician will review your records and examine you. If you and your physician agree to the procedure, the PAE can be scheduled.

You will need to take some medications for 2 days right before the procedure. These will help your recovery later. You can buy the medicine over-the-counter at your local pharmacy. 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 the day of your procedure.

Day of the procedure

On the day of the procedure, you will report to the Interventional Radiology Department located on the 4th floor of the Feinberg Pavilion, Northwestern Memorial Hospital, 251 East Huron Street, Chicago, Illinois 60611.

Parking is available for patients and visitors in the garage at 222 East Huron Street, across from the Feinberg and Galter pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Services Desks on the 1st and 2nd floor of the Feinberg and Galter pavilions and the 1st floor of Prentice Women’s Hospital (including the Prentice 24-hour desk near the Superior Street entrance).

Be sure to bring:

- A list of your allergies
- A list of all your current medications (prescription, over-the-counter and herbals) and the last time taken
- Photo ID
- Medical insurance information and card
- Medicare Card (Medicare patients)

Please leave all valuables, such as jewelry, credit cards and money at home. Medicine given during the procedure will make you drowsy, so it is important to arrange to have a responsible adult take you home. Family members may wish to bring a magazine or book to read while they are waiting. They may leave the hospital and return at a later time to pick you up. We ask for a cell phone or a contact phone number in case we need to reach a family member.

After you check in with the receptionist on the 4th floor, you and 1 member of your family will meet with staff who will bring you to the prep and recovery area. Here they will review your health history and medications. You will have a short physical exam. After reviewing the procedure and type of sedation, and asking any questions you may have, you will be asked to sign a consent form.

Once you change into a hospital gown, an IV (into the vein) line is placed in your arm or hand. This allows fluids and medicine to be given during the procedure. An antibiotic will be given through the IV to prevent infection. Before the procedure, we will place an external condom catheter and attach it to a drainage bag to collect urine. Sometimes, an indwelling urinary catheter (Foley) may be placed instead, if the physician performing the procedure decides that this is needed.

**During the procedure**

A special X-ray machine will take pictures that guide the physician during the procedure. (see Figure 1 below). 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](image-url)
Your heart rhythm and blood pressure will be monitored. Medicine will be given through the IV to relax you. Your groin area will be shaved and cleaned with a special soap, then covered. The area will be numbed, then a small catheter is inserted through the artery in your groin to the prostate. You may feel pressure, but you should not feel any pain.

Once the catheter is in the prostate, dye will be injected. You may feel a sudden flushing or warmth. This will last only a few seconds. Then, small beads will be passed into the prostate. Finally, the artery catheter will be removed.

The physician may stitch the small wound left by the catheter. If so, it will slowly dissolve and does not need to be removed. You will need to lie flat or at no more than a 30-degree angle with your leg straight for 2 to 4 hours. This allows the wound to close to prevent bleeding.

If you do not have stitches, pressure will be applied to 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 spend 2 to 4 hours in the recovery area. The condom catheter will be removed. 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 be instructed to restart the Aleve and Prilosec for 10 days. Your physician or nurse will explain these medications to you.

You will need to follow up with your urologist in about 1 month after the procedure. At that time, the physician will decide what follow-up testing and future office visits you will need.

At home
Activity
Complete recovery usually takes 7 to 10 days.

On the day of discharge:

- Limit your activities and get plenty of rest.
- Do not drive for 24 hours.
- You may begin to resume your normal activities the day after you leave the hospital.
- No physical exertion or heavy lifting (greater than 10 pounds) is allowed for the next 3 days.
- You may shower. Do not bathe in a tub for 5 to 7 days.

Slowly increase your physical activity. Depending on your work and its demands, you may return to work.

Check your temperature each day, or if you feel warmer than usual.
**What to expect**

You will be instructed to drink fluids throughout the day and evening of your procedure to flush the dye from your system. You may notice the need to urinate more frequently than usual. You may also feel more urgency to urinate.

**When to call the physician**

Contact your physician if you have:

- Fever over 101.5 degrees F for more than 1 day
- Pain or cramping in the abdomen not relieved by your pain medication
- Severe nausea or vomiting
- Bleeding at the puncture site
- Any changes in the groin site

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

**Wound healing**

The healing puncture site should remain soft and dry. Please notify your physician if you notice any of the following signs:

- 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
- Increased bruising extending to the thigh, over the buttock and/or groin
- Color change and/or coolness of the leg or foot

**Bleeding**

If you notice a small amount of bleeding or oozing from the puncture site, please do the following:

- Immediately lie flat.
- Apply firm 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 apply pressure.
- After 20 minutes, remove pressure. The wound should be dry and flat without bleeding. Cover the wound with a Band-Aid®. Call your physician right away.

If the bleeding does not stop, go to the nearest emergency room or call 911.
**Arterial bleeding**

The following signs could mean that the puncture in the artery has reopened and that there is more bleeding:

- Quickly increasing swelling of the area around the wound which may be pulsating
- Continuous blood streaming from the wound
- A jet of blood pumps from the puncture wound

**Immediately apply hard pressure above the puncture site and call 911.**

**Contact numbers**

If you have questions or concerns, please contact the clinical care coordinator for prostate artery embolizations at 312.695.9327.

If you are unable to reach the coordinator, please 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.

**Northwestern Medicine—Health Information Resources**

For more information, contact Northwestern Memorial Hospital’s Alberto Culver Health Learning Center (HLC) at hlc@nm.org, or by calling 312.926.5465. Health information professionals can help you find the information you need and provide you with personal support at no charge.

For more information about Northwestern Medicine, please visit our website at nm.org.