

Vascular Radiology Service **Prostate Artery Embolisation (PAE)**

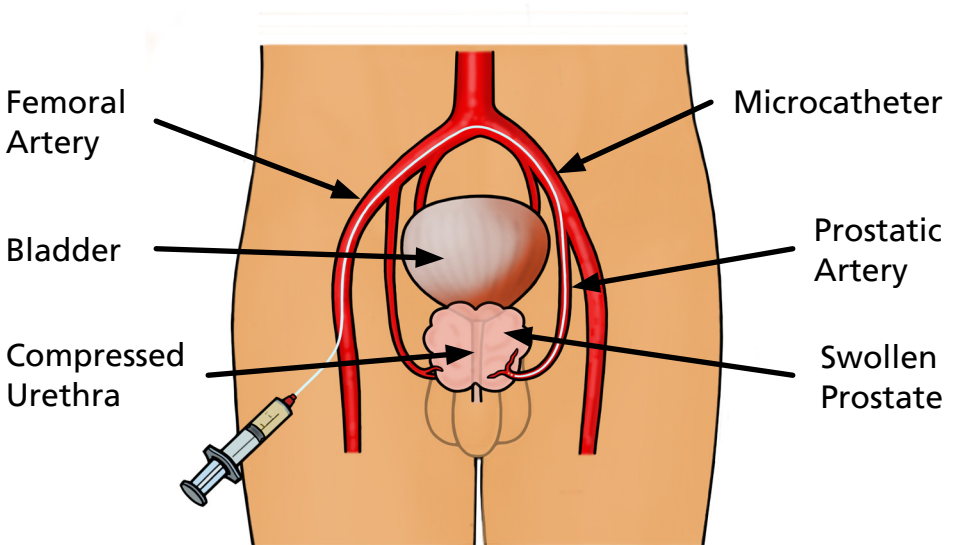
Information for patients



Leeds
Radiology

What is prostate artery embolisation?

Prostate artery embolisation (PAE) is a minimally invasive treatment for benign prostatic hyperplasia (BPH, an enlarged prostate). It works by reducing the blood supply to the prostate so that it gradually shrinks, which can improve urinary symptoms. PAE is performed by an interventional radiologist using X-ray guidance.



How is prostate artery embolisation performed?

Anaesthetic

The procedure is usually performed under local anaesthetic. The skin in the groin or wrist will be cleaned with antiseptic, draped with sterile towels and drape and numbed with local anaesthetic. This stings a little. You will also be connected to equipment to monitor your heart beat and blood pressure.

Operation

A small tube (catheter) is inserted into an artery at the wrist or groin. Using X-ray guidance and contrast dye, the catheter is steered into the arteries that supply the prostate. Very small particles are injected to block these arteries (embolisation). Both sides are usually treated in the same session.

Consent

The procedure typically takes 60 - 120 minutes, though every patient is different and some operations may take longer. The operating interventional radiologist will explain this to you in more detail during the day of your operation, where you will be asked to provide your permission to go through it by signing a consent form.

What are the risks?

Every procedure has risks. Your doctor will discuss the risks relevant to you, including those related to your general health and medications.

Common/expected effects (usually settle within days to weeks):

- Burning or stinging when passing urine (dysuria).
- Increased urinary frequency/urgency for a short time.
- Mild pelvic discomfort, tiredness, low-grade fever (post-embolisation syndrome).
- Blood in the urine, semen or stool for a short period.

Specific risks (uncommon):

- Urinary tract infection requiring antibiotics.
- Temporary inability to pass urine (urinary retention) which may require a catheter.
- Allergic reaction to contrast dye.
- Kidney function worsening due to contrast dye (particularly if you already have kidney disease).
- Bleeding or bruising at the puncture site, or damage to the artery (rarely requiring further treatment).
- Non-target embolisation (particles reaching nearby organs such as bladder, penis or rectum) which can cause tissue injury or ulceration (rare).
- Prostate infarction/necrosis requiring additional treatment (rare).

X-rays will be used to make images of your body and guide your doctor during the procedure. X-rays are a type of radiation. We are all exposed to low levels of natural radiation as part of our everyday lives and medical x-rays give an extra dose of radiation. Radiation can increase your chances of developing cancer many years or decades after the exposure. The chances of this happening to you as a result of this procedure are considered to be very low.

In some very rare situations, you might experience some hair loss or some reddening of the skin in the area that was treated. If this happens, you should contact your clinical team who will be able to give some advice on the simple steps you can take to look after your skin.

It is important to remember that your doctor thinks that the benefits of this procedure outweigh any risks from the radiation. We will make sure that the amount of radiation used in your procedure is as low as possible.

Staff Involved

Interventional Radiology (IR) procedures are performed by a multidisciplinary team. The team includes the following key Staff:

- **Interventional Radiologist (Consultant/Fellow):** A doctor specially trained in minimally invasive, image-guided techniques who performs the procedure.
- **Radiology Nurses:** Highly trained nurses who care for the patient before, during, and after the procedure. They assist with sedation, monitor vital signs (heart rate, breathing, oxygen levels), and may “scrub in” to assist the radiologist directly.

- Radiographers: Experts in imaging equipment who operate the machines to provide real-time guidance for the doctor.
- Senior Clinical Support Workers (SCSWs): Assist with the setup of the room, patient positioning, and maintenance of sterile conditions.

What to expect from this procedure?

Admission

You will be admitted to the Radiology Theatres department on the morning of the operation. You will have a cannula (a small plastic tube in the vein) to allow us to give any medication or fluid intravenously if required. Most patients are discharged the same day.

On the day of your procedure, the radiology team may include:

- Consultant Interventional Radiologist
- Resident / Fellow
- Radiology Nurses and Support Workers
- Interventional Radiographer
- Clinical Nurse Specialist

How do I prepare?

You will be seen in clinic by an interventional radiologist and will have a CT scan to assess the anatomy. If PAE is the right treatment for you, we will schedule the procedure and guide you through the necessary pre-operative steps. You will receive letters with details of your pre-admission clinic appointment and your day-case unit admission. You will usually have blood tests in the pre-admission clinic.

Please bring a list of your medications.

- If you take blood-thinning medicines (e.g. warfarin or apixaban), please ensure you have been given instructions about stopping them before your procedure. If not, contact us urgently, as the procedure may have to be cancelled. You should continue taking all your usual medicines (e.g. for blood pressure or diabetes) unless you have been advised otherwise.
- Fasting prior to the procedure is generally not necessary.

You may be given antibiotics, pain relief and anti-sickness medication.

Recovery

After the procedure you will be monitored in recovery Your blood pressure and pulse will be monitored, then you will be transferred to a day case ward such as David Beevers Day Unit. Most patients experience mild to moderate pelvic discomfort and urinary irritation for several days. Painkillers and anti-inflammatory medication are usually prescribed. You will be encouraged to drink plenty of fluids.

Aftercare

The puncture site (wrist or groin) will be checked regularly. You will be encouraged to mobilise once it is safe. Most patients go home the same day.

Care at Home

We recommend that someone is at home with you on your first night after discharge. The following advice will support your recovery:

- Exercise: Start with gentle activity. Avoid strenuous exercise or heavy lifting for 2 - 3 weeks.
- Work: many patients return to work within 3 - 7 days depending on symptoms and occupation.
- Driving and travel: Avoid driving for 48 hours and only resume when you can perform an emergency stop safely.
- Medicines: take pain relief as advised. You may be prescribed anti-inflammatories and sometimes antibiotics. Restart your regular medicines as instructed by your team. If you were told to stop any medicines (especially blood thinners), follow the restart plan you were given.
- Hydration: drink extra water for 48 - 72 hours unless you have been told to restrict fluids.
- Activity: gentle activity is encouraged; avoid heavy lifting/ strenuous exercise for 5 - 7 days.
- Follow-up: You will receive telephone follow-up at two and eight weeks, and a clinic appointment at six months.
- Seek urgent advice if you develop fever, worsening pain, inability to pass urine, heavy bleeding, or increasing swelling at the puncture site. You will receive contact details before you leave the hospital.

Results

PAE can improve lower urinary tract symptoms due to BPH and may reduce prostate size over time. Symptom improvement usually begins within days to weeks and may continue for several months. Not all patients respond, and some may require additional treatment. Your doctor will discuss expected outcomes based on your prostate size and test results.

Contact information

We hope some of your questions have been answered by this leaflet. If there are any questions you would like to ask before you come for your operation, please get in touch.

Via telephone:

Interventional Radiology SJUH: **0113 206 6841**
(Monday - Friday from 9am until 5pm, except Bank Holidays)

Your GP or NHS direct on **111**

Call 999 for life-threatening emergency

Or via email: **leedsth-tr.radiologyenquiries@nhs.net**

How to get to our department

We are located in the Lincoln Wing of SJUH, Ground Floor.
Check this link to see how to get to us AccessAble - Your Accessibility Guide.

www.accessable.co.uk/leeds-teaching-hospitals-nhs-trust/st-james-s-university-hospital/access-guides/lincoln-wing





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