Prostate Artery Embolisation (PAE)
Interventional Radiology

This leaflet provides information about the procedure, what to expect on the day, the potential risks and important information for afterwards.

Prior to the procedure, you will have a telephone consultation, where you will have the opportunity to ask further questions.

Please note that this leaflet is not meant to replace discussion between you and your doctor. You should raise any questions you may have with the doctor who has referred you or with the doctor who will be performing the procedure.

What is prostate artery embolisation (PAE)?

PAE is a procedure used to treat the enlarged prostate (a gland located in the pelvis between the penis and bladder). It works by blocking off the arteries that supply the gland, which makes it shrink. It is an alternative to having surgery to remove prostate tissue. PAE is minimally invasive (performed through a tiny cut in the skin under local anaesthetic) and usually done as a day case procedure, with a quick recovery and return to normal daily activities. Most patients begin to notice an improvement in urinary symptoms within 4-6 weeks, with further improvement over the following months, with approximately 70-75% of patients maintaining symptom improvement at up to 5 years following treatment.

Why do I need a PAE?

You may need to have this procedure if you have significant problems passing urine, which are affecting your quality of life and are due to an enlarged prostate. Prostate enlargement is very common, affecting up to 80% of men by the age of 70. Symptoms can include poor urine flow, dribbling at the end of urination, urinating little and often, having to get up multiple times in the night to urinate and difficulty emptying your bladder in one go. By shrinking the size of the prostate, PAE can help improve these symptoms. PAE can also be used to help with removal of a long-term bladder catheter that has been placed for urinary retention (success rate >80%) and in treating patients suffering from bleeding related to the prostate (success rate >85%).

Tel: 01932 723470 **Email:** asp-tr.ir-referrals@nhs.net

How do I prepare for a PAE?

You will have a pre-assessment telephone consultation with a nurse before your admission and may be asked to have blood tests before the procedure.

You should stop eating 6 hours prior the procedure, however you can drink 1 cup of clear water per hour until the procedure starts.

As it's a day case procedure, you need to arrange for an adult to collect you from the department and someone to stay overnight with you.

The procedure will take place in the Interventional Radiology (IR), within the Radiology Department at St. Peter's Hospital. When you arrive, you will be given a hospital gown to change into, and a nurse will insert an IV cannula.

The doctor will discuss the procedure with you; answer any questions you may have and ask you to sign a consent form if you are happy to proceed.

How is PAE performed?

The procedure will likely be performed under local anaesthetic. Intravenous pain relief and light sedation may also be given, to ensure you are as comfortable as possible.

If you are feeling unwell closer to the day of the procedure, please let the team know.

The skin is cleaned, numbed with local anaesthetic and an ultrasound is used to guide a needle and a plastic sheath into the artery. The rest of the procedure is performed through this sheath. Contrast is injected that can be seen on X-ray and this provides a map of the arteries feeding the prostate. Wires and plastic catheter tubes are used to navigate to the prostate arteries, and tiny particles are then injected into the prostate, which block the blood vessels and starve the prostate of its blood supply. The procedure is repeated on both sides of the prostate.

The entire procedure lasts between 1 and 3 hours.

At the end of the procedure, the hole in the artery is closed using a dissolvable plug or by pressing on the vessel.

What are the potential risks / complications of PAE?

PAE is a safe and effective procedure, but like all procedures there are some risks and potential complications:

Pain and post-embolisation symptoms

- Pelvic discomfort, burning when passing urine, urinary frequency, fatigue, or mild flu-like symptoms can occur in up to 30-40% of patients
- These symptoms are usually mild to moderate and settle within a few days to one week
- They can be managed with simple pain relief and anti-inflammatory medication

Bruising or haematoma

- Bruising at the access site (groin or wrist) is common (up to 10-15%)
- This usually settles without treatment

Urinary tract infection

- Occurs in approximately 1-2% of patients
- Preventative antibiotics are routinely given
- Severe infection (sepsis) is very rare (<0.5%)

Temporary urinary retention

- Around 1-5% of patients may require a temporary urinary catheter due to prostate swelling
- This is usually short-term

Non-target embolisation

- Unintentional blockage of nearby vessels (e.g. bladder, rectum, or penis) is rare (<1%)
- Usually mild and self-limiting

Arterial injury or spasm

- Occurs in less than 1-2% of cases
- Typically managed during the procedure without long-term effects

Retrograde ejaculation

- Occurs in approximately 1-5% of patients
- Less common than with surgical treatments
- Erectile function is usually unchanged

Technical failure

- In around 5–10% of cases, the prostate arteries cannot be safely accessed
  This may mean the procedure cannot be completed

Radiation exposure (X-rays)

- PAE uses X-ray guidance. The radiation dose is kept as low as reasonably achievable.

Incomplete symptom improvement

- While most patients benefit, up to 20–25% may have limited improvement
- Some patients may require further treatment

What happens afterwards?

After the procedure, you will be monitored in a recovery area.

- Your blood pressure, pulse and comfort will be monitored
- You will usually be able to go home the same day
- You will need to pass urine before discharge if you do not have a catheter

You should:

- Rest for 2-3 days after the procedure
- Avoid strenuous activity or heavy lifting for 1 week
- You must not drive for at least 24 hours and until your pain has resolved
- Take prescribed antibiotics and pain relief as directed
- If the PAE has been performed to enable removal of a bladder catheter, this will be arranged by the urology team.

It is common to experience mild pelvic discomfort or urinary symptoms for a few days.

Seek urgent medical advice if you experience:

- Severe or worsening pain
- Inability to pass urine
- Fever or signs of infection
- Heavy bleeding in the urine

You will usually be contacted by the radiology team for a follow-up consultation approximately 2 weeks after the procedure.

Further follow-up will be arranged with your urology team as appropriate.

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email asp-tr.patient.advice@nhs.net. If you remain concerned, the team can also advise upon how to make a formal complaint.

Author: Cathie Tenreiro – IR Clinical Specialist Nurse **Department:** Imaging
Version: 1 **Published:** April 2026 **Review:** April 2029

Interventional Radiology

St Peter's Hospital

Tel: 01932 723470

Email: asp-tr.ir-referrals@nhs.net

We can provide interpreters for a variety of languages, information in larger print or other formats (e.g. audio) - please call us on 01932 723553.

You can use Text Relay to turn telephone communications into text. Use the Relay UK app on your phone, tablet or PC. You can also use Relay UK via Minicom or Uniphone.

اگر نیاز به ترجمه دارید، لطفا با شماره 01932 723553 تماس بگیرید.

ਜੇ ਤੁਹਾਨੂੰ ਤਰਜਮੇ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਸ ਨੰਬਰ ਤੇ ਫੋਨ ਕਰੋ: 01932 723553

اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براہ کرم اس فون نمبر 01932 723553 پر رابطہ کریں

Se precisa de uma tradução por favor contacte: 01932 723553

আপনার অনুবাদের দরকার হলে এখানে যোগাযোগ করুন : 01932 723553

यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

Ashford Hospital London Road, Ashford, Middlesex, TW15 3AA Tel: **01784 884488**
St. Peter's Hospital Guildford Road, Chertsey, Surrey, KT16 0PZ Tel: **01932 872000**
Website: **www.ashfordstpeters.nhs.uk**