

Patient information leaflet

Prostate Artery Embolisation (PAE)

Radiology department

Introduction

We hope this guide will answer your questions about your prostate artery embolisation (PAE). Please contact the team if you require further information via the details at the end of this leaflet.

What is a prostate artery embolisation examination?

The prostate gland is located under the urinary bladder and wraps around the water pipe (urethra). Enlargement of the prostate gland can lead to a blockage of the flow of urine.

This can lead to various symptoms, including reduced urine stream and frequent need to urinate during the night.

Prostate artery embolisation is a minimally invasive non-surgical new treatment option for prostate enlargement.

PAE blocks off the blood flow to the small arteries supplying the prostate gland making the gland shrink and allowing a better flow of urine.

This is achieved with an injection of small particles into these arteries. PAE can also be used for controlling bleeding from the prostate gland.

Why do I need a prostate artery embolisation examination?

The decision was made by your urologist and an interventional radiologist who is going to perform the procedure.

Interventional radiologists are doctors specially trained to perform minimally invasive treatments of various diseases with guidance of an x-ray machine, avoiding the need for open surgery. This includes inserting and navigating special catheters inside blood vessels.

In addition to the standard tests for prostate enlargement, you will need to have a special CT scan (CT angiogram) to help us visualise the arteries in your pelvis. This will help the radiologist to decide if the anatomy of your arteries is suitable for the treatment.

If tests have shown that you are suffering from an enlarged prostate gland you probably have already been told about the more traditional treatment options, including a TURP (trans urethral resection of prostate) operation and medication by your urologist or GP.

In your case, a decision was made that you are likely to benefit from an alternative non-surgical treatment option: prostate artery embolisation.

Are there any risks?

X-ray radiation: All X-ray procedures involve exposure to radiation in varying amounts. The dose you get from a medical x-ray is very low, and your doctor has determined that the benefits of having the examination outweigh potential risks.

The radiographer is present throughout your test, making sure that the dose is kept as low as reasonably possible and the duration and level of X-rays are kept to a minimum.

Procedure: Infection occurs in up to 2% of patients. The signs are severe pain, pelvic tenderness and a high temperature. In this procedure antibiotics are given prior to the procedure to prevent the likelihood of infection.

Contrast medium: A very small number of patients have an allergic reaction to the contrast medium (an iodine based solution often known as x-ray dye). This can be minor, severe, or even life threatening but the chances of this occurring are very rare. If you get an itchy rash or difficulty breathing during the procedure tell a member of staff, the team will provide appropriate treatment.

Before your examination begins the radiographer will ask you a series of questions about your medical history, including any allergies you may have. This will help us assess if you are at risk of an allergic reaction to the x-ray dye.

Will I need an injection?

Occasionally, patients are given antibiotics, painkillers and other medications through a cannula placed in your arm.

Preparing for your procedure

You will need to have a CT scan prior to your procedure. This will involve an injection of x-ray dye (contrast). You may need to have a blood test before this if you do not have a recent blood result on our system.

You may need to be admitted to the hospital usually as a day case.

You may receive a sedative to relieve anxiety.

Please do not have anything to eat for 4 hours prior to your procedure.
You may still drink clear fluids such as water.

If you are unsure or have questions about your preparation, contact your doctor or Radiology nurses for advice.

Please leave any jewellery or valuables at home.

Please contact the booking team before your appointment if:

- you have had a previous allergic reaction to x-ray dye (contrast agent) or are allergic to iodine.
- If you take metformin to manage your diabetes.
- If you weigh over 30 stone/190 kilograms
- If you plan on using hospital transport or need a hoist to transfer
- If you require an interpreter – please inform us as soon as you receive your appointment letter, and we will arrange an interpreter for you.

Allergies

If you have asthma or any allergies, especially to iodine or contrast medium (x-ray dye), please inform us in advance.

Medication

Please continue to take all medications as usual prior to your examination. If you are on any medication which thins the blood (e.g. aspirin, clopidogrel, warfarin, rivaroxaban, dabigatran, apixaban) we ask you to call the radiology department using the number below as we may need to adjust your medication before undergoing this procedure.

Getting to us

When attending The Princess Alexandra Hospital (Hamstel Road, Harlow, Essex, CM20 1QX), follow the signage to the radiology reception, which is located on the ground floor, green zone.

Please let the receptionists know that you have arrived for your appointment.

When should I arrive?

Please arrive in the radiology department at your given appointment time. A notification through text or letter should have been sent to you to confirm this appointment.

Can someone stay with me in the hospital?

You may have a friend or relative attend with you, but they will be asked to stay in the waiting area while you have your procedure.

Children are not allowed in the waiting area unattended. Our staff are not permitted to supervise children, so please ensure child care arrangements are in place to avoid your tests being rescheduled.

The day of the procedure

You will be shown to a cubicle and asked to undress and put on a gown; please bring a dressing gown if you have one. You may also be asked to remove jewellery, dentures, glasses, or other metal objects, which may show up on the X-rays.

The procedure

Your identification will be checked by a nurse and radiographer, a brief history will be taken; please tell the radiologist what medication, severe allergies, choking episodes or other medical conditions, such as thyroid disease and diabetes you may have.

Before the procedure, the interventional radiologist will explain the procedure and ask you to sign a consent form.

Please feel free to ask any questions that you may have and, remember that even at this stage, you can decide against going ahead with the procedure if you so wish.

You will lie on the X-ray table, generally flat on your back. You may have monitoring devices attached to your chest and finger and will be given oxygen.

The procedure is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves.

A small cannula (thin tube) will be placed into a vein in your arm for antibiotics, sedative and painkillers to be given.

The skin near the wrist or groin will be cleaned with an antiseptic solution and covered with sterile drapes.

Using an ultrasound machine, the radiologist will then inject local anaesthetic into the skin and deeper tissues over the artery. This will briefly sting and then go numb. Most people will feel a pushing sensation.

A small tube (catheter) is inserted into the artery and navigated inside your blood vessels with the help of the x-ray machine to select the arteries responsible for the blood supply of the prostate gland. The x-ray dye will be injected into your arteries several times during the procedure to aid the navigation of the catheter. During these injections you may be asked to hold your breath and keep very still. The injection of the x-ray dye can cause a hot sensation in your pelvic area which is normal and temporary.

Both the left and right prostate arteries can usually be reached with accessing only one artery but sometimes we may need to use the artery in the groin.

Once the catheter is in the correct position, tiny particles are slowly injected into the prostate artery. When the injection into both left and right prostate arteries is complete, the catheter is removed from the artery and pressure by hand or a special stitch/ pressure band is applied at the puncture site to prevent bleeding. You will be asked to remain still for another few hours after the procedure.

After the procedure

You will be taken back to the recovery area. Nursing staff will carry out routine observations including pulse and blood pressure and will also check the treatment site.

You will be allowed to eat and drink as usual, and if there are no complications or concerns, after monitoring, you may be allowed to go home the same day.

Can I drive after my procedure?

No, it is important that you have a responsible adult to escort you home. You must not drive or use public transport for the journey home.

How soon can I return to work?

This will be advised by your attending radiologist.

When will I get my results?

You will not know the results of your examination immediately. The radiologist will report their findings to the clinician who arranged your procedure, who will discuss the results with you. It usually takes a couple of weeks for the results to become available.

What do I do if I feel unwell after I have gone home?

You may have a small amount of bruising around the site of entry; however, if you notice any excessive bleeding you should call your GP, or go straight to the A&E department. If you experience a high temperature or fever, excessive pain, or diarrhoea you must contact your GP or the A&E department as you may have an infection which needs to be treated with antibiotics.

Contacting the team

If you have any further questions about your procedure or an existing appointment, please contact the radiology department **(Monday to Friday, 8am to 6pm)** at **01279 82 2527 / 3405**

If you have any queries **outside of working hours (after 4pm and on weekends)**, you will be redirected to the main radiology reception.

Please note appointment bookings cannot be made at this time.

Your feedback matters

If you would like to give feedback on your care, please contact our patient experience team at paht.pals@nhs.net or **01279 827211**.

Please contact the communications team at paht.communications@nhs.net if you would like this leaflet in another language or format.

