

# Prostate artery embolisation (PAE)

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**This leaflet explains what prostate artery embolisation is, what happens during the procedure and what the possible risks are. It is not meant to replace discussion between you and your doctor but can act as a starting point for such a discussion.**

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## What is prostate artery embolism and why do I need it?

- Prostate artery embolisation (PAE) is a day-case procedure in which the blood supply to the prostate gland is reduced by introducing small particles into the prostate artery.
- PAE is used to treat the symptoms of an enlarged prostate gland, often referred to as benign prostatic hyperplasia (BPH). BPH is a very common condition affecting men as they get older. The condition can be debilitating – patients often complain of a constant urge to pass urine, poor urine stream, needing to pass urine several times a night causing disturbed sleep, and not being able to completely empty the bladder.
- PAE is also offered to men to control bleeding from the prostate gland.

## Preparation for your PAE procedure

- A consultant urologist will assess your symptoms and take a thorough history of your medical problems prior to the procedure. A consultant interventional radiologist will then meet with you to explain what is involved (see below).
- **You will be asked not to eat for 6 hours or drink for 2 hours before the procedure** as light sedation is often used to help you relax.
- On the day of the procedure, you will be greeted in the Radiology Department at the Royal Berkshire Hospital. You will be given a dose of oral antibiotic to minimise the risk of a urinary tract infection. You will also be given a painkiller, which you can continue to take, as required for up to a week after the procedure. You may experience pain in your pelvic region for a few days after the procedure.

## What happens during the procedure?

- A consultant interventional radiologist will perform the prostate artery embolisation. It normally takes about two hours.
- Following administration of local anaesthetic to numb the area, a small plastic tube known as a catheter is placed into the artery in your groin.
- Small wires and catheters are then carefully manipulated into the small prostate arteries using x-ray guidance.
- Once the interventional radiologist believes the catheter is in the desired position, a specialist CT scan is performed to confirm the catheter is correctly placed while you lie on the x-ray table.

- The prostate arteries are blocked using small particles, which are like tiny grains of sand. Both right and left prostate arteries are blocked in this way, often from a single puncture of the artery overlying your right groin.
- By blocking the arteries to the prostate, research has shown that the prostate gland shrinks, relieving the symptoms of an enlarged prostate gland. At the end of the procedure, the puncture wound will be closed either using a small dissolvable stitch, or by pressing on the artery for 10 minutes.

### **What are the risks of PAE?**

- There may occasionally be a small bruise at the site where the needle has been inserted into the artery in the groin.
- There is also a small risk of infection, which is minimised by giving you a short course of oral antibiotics.
- Most patients feel some mild pain afterwards, which is controlled by simple painkillers.
- There is a very small risk of the particles used to block the prostate arteries going into nearby arteries (called 'non-target embolisation'). This could result in reduced blood supply to some organs and is a potentially serious complication. We use the special CT scan during the procedure to confirm the position of the catheter prior to injecting any particles as this reduces the risk of this happening.
- Finally, there is the risk associated with radiation exposure, as we use x-rays to guide where we place the catheters during PAE. Radiation is strictly controlled to minimise the risk to patients.

### **Aftercare**

- You will be taken back to a recovery area on a trolley.
- You will need to lie flat for two hours to enable the small wound in your groin artery to heal. You will then need to be monitored in bed for a further two hours. Once you have had something to eat and drink, and successfully passed urine, you will be able to go home in the afternoon.
- You will need someone to drive you home, and someone to stay with you overnight at home, as is standard practice following this type of procedure.
- You will be given painkillers to take if needed.
- You will be reviewed at a follow up appointment three months after the procedure.

### **When to seek help**

Please contact us if you experience:

- New fresh or increased bleeding from the groin or in your urine or bowel motions.
- Pain that is not controlled with painkillers.
- New leg symptoms such as pain or changes in colour.

**Please bring this information sheet with you if you seek medical attention.**

Compassionate

Aspirational

Resourceful

Excellent

## **When can I resume my normal lifestyle?**

You should be able to resume most normal activities of daily living within 24 hours but please avoid driving or strenuous activities for 48 hours.

## **When can I drive?**

You should not drive for 24 hours following the procedure.

## **What happens next?**

- Your follow-up will be explained to you on discharge.
- You are typically assessed in the Radiology Clinic three months after your treatment.
- If you have a urinary catheter, an appointment will be booked for you to attend the Urology Procedures Department to remove the catheter two weeks after the PAE procedure.

## **Contacting us**

Radiology Department, Tel 0118 322 7991.

Radiology Day Case Unit, Tel 0118 322 8368 (Monday-Friday 8.30am-5pm).

Out of hours please attend the Royal Berkshire Hospital's Emergency Department (A&E) or your nearest Emergency Department.

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

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Dr M Little, RBFT Radiology, March 2023.

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