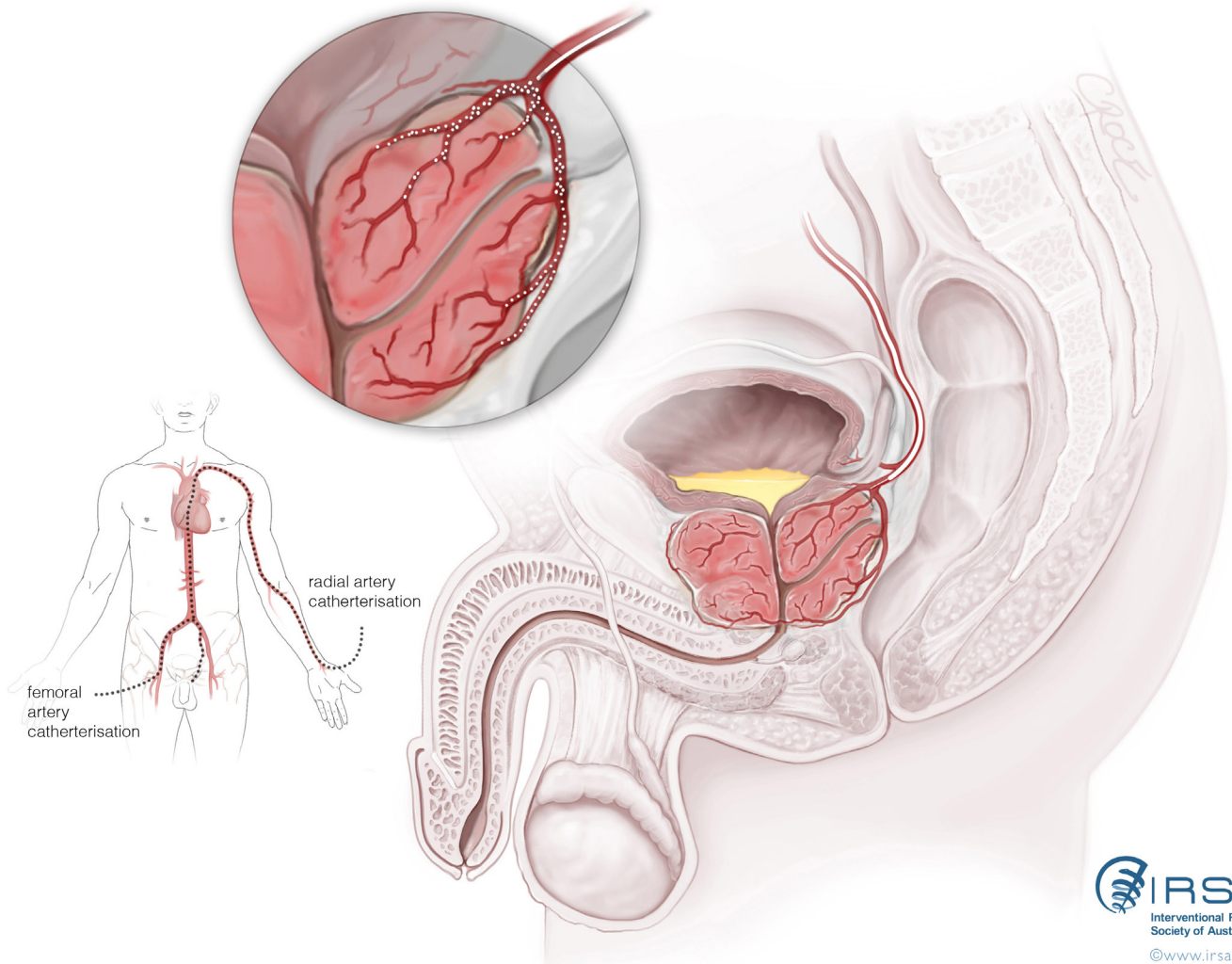


PROSTATE ARTERY EMBOLISATION (PAE)



1. WHAT IS PROSTATE ARTERY EMBOLISATION (PAE)?

Prostate artery embolisation is a minimally invasive procedure performed by interventional radiologists to treat an enlarged prostate. Under X-ray guidance, a micro-catheter (a very fine tube) is navigated to the arteries supplying the enlarged prostate. Tiny plastic beads are then deposited to reduce the blood supply, which shrinks the prostate.

2. WHY WOULD MY DOCTOR REFER ME TO HAVE THIS PROCEDURE?

If you have symptoms that are related to enlargement of the prostate (prostatic hyperplasia/hypertrophy), you may be suitable for PAE with the aim of improving urinary symptoms, as a minimally invasive alternative to surgery. This treatment may delay or remove the need for surgery altogether.

Patients being considered for PAE will undergo a basic assessment of their prostate and bladder to make the diagnosis of Benign Prostatic Hyperplasia (BPH), which normally includes:

- an ultrasound of the bladder and prostate to assess for any other causes
- a blood test called prostate specific antigen (PSA)
- an examination of your urine flow.
- in selected cases, a prostate MRI, biopsy, or further tests may also be needed.
- If you are planned for PAE after you see the doctor, a special CT scan of the arteries will be performed to plan the procedure.

3. HOW DO I PREPARE FOR THE PROCEDURE?

You will normally be required to fast from midnight before the procedure, and certain blood thinners such as warfarin may need to be withheld. You can continue any current prostate medications you are taking.

4. WHAT HAPPENS DURING THE PROCEDURE?

Your procedure may be performed under local anaesthetic or with additional twilight sedation.

Firstly, your upper thigh or wrist is cleaned and numbed, then a fine catheter (plastic tube the size of a piece of spaghetti) is threaded into the artery and guided towards the prostate under x-ray guidance. The procedure is generally painless after an initial pinprick. Once in position, x-ray images are taken to check your anatomy and blood supply to the prostate. A very fine tube called a microcatheter (<1mm) is then threaded through the catheter and passed into the artery supplying the prostate.

Once the correct blood vessels are verified, plastic microspheres are used to block the artery to the prostate. By reducing its blood supply, the prostate undergoes shrinkage over time. Both the left and right sided arteries to the prostate can be treated through the one access pinhole in the artery.

The pinhole access will be sealed with a special absorbable plug, and you will rest in bed and be monitored for a few hours following the procedure. You will typically go home on the same day, or an overnight stay might be arranged.

The procedure takes approximately 2-3 hours to perform.

5. WHAT IS THE RECOVERY NORMALLY LIKE?

Standard recovery from any minimally invasive trans-arterial procedure like this involves:

- No driving for 24 hours post the procedure.
- Avoid strenuous exercise or lifting more than 10kg for 48 hours
- Leave the dressing intact over the access pinhole for 48 hours (but you can shower as normal).

It is normal to experience some prostate irritation for the first week after the procedure, which feels like a flare of your usual urinary symptoms and includes discomfort when urinating.

6. WHAT ARE THE RISKS

The procedure involves an angiogram, which is a picture of your blood vessels taken using a small plastic tube which is placed into the artery. This part of the procedure carries a 5% risk of bruising and a small risk of complications with the artery such as bleeding or blockage of the artery which occurs uncommonly <1%.

X-ray dye (contrast) is used to check internal anatomy throughout the procedure. This can cause kidney problems for people with kidney disease – let the doctor know if you have kidney disease and a blood test will be performed to check this and exclude this risk.

The prostate blocking procedure itself is not usually painful however after the procedure, it is common to experience mild pain and low-grade fever as the prostate responds to its blood supply being reduced.

Some of the more common risks include urinary retention needing a temporary catheter for approximately 1-week, occasional bleeding on passing urine, ejaculating or in bowel motions, urinary infection, or diarrhoea.

There are more serious risks described due to the blocking of arteries outside the prostate which supply nearby organs - but these are fortunately very rare.

7. WHAT ARE THE BENEFITS?

Men who have undergone PAE have reported high satisfaction, no urinary incontinence, or sexual side effects.

PAE has a shorter recovery and fewer complications than traditional surgery and improves symptoms and quality of life greater than medical therapy.

8. WHEN CAN I EXPECT THE RESULTS OF MY PROCEDURE?

Most patients report a noticeable improvement within the first month however, the gradual shrinkage of the prostate continues over about 6 months.