

Treating your prostate condition by blocking its blood supply (prostate artery embolisation)

Department of Radiology

Information for Patients

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Introduction

This leaflet tells you about the procedure called prostate artery embolization, including the possible risks. This will help you to decide whether or not to go ahead with the procedure.

Your pre-assessment appointment

If you are having this procedure as an outpatient you will have an appointment for a pre-assessment. At this appointment you will have some tests including an up-to-date blood test. The tests will make sure that everything is suitable and ready for your procedure which you will have on a different day. Please bring a list of your medicines with you to this appointment. After reading this leaflet, if you have any questions, write them down to remind you what to ask when you come to your pre-assessment.

You will be sent another appointment on a different day for the actual procedure.

What is a prostate artery embolisation (PAE)?

Prostate artery embolisation (PAE) is a non-surgical treatment to block the arteries that supply blood to the prostate. It is done to treat enlarged prostates and bleeding from the prostate. The procedure uses an X-ray camera to help the doctor inject tiny particles through a thin plastic tube (catheter) into these arteries. This reduces the blood supply and causes the prostate to shrink.

Why do I need this procedure?

Tests will have shown that you either have an enlarged prostate (benign prostatic hyperplasia (BPH)), or bleeding from your prostate. Your urologist and your GP will have told you about other ways of dealing with this, such as lifestyle changes and medication.

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

Previously, more severe prostate symptoms have been treated by a surgical procedure called transurethral resection of prostate (TURP) or laser surgery.

PAE uses local anaesthetic instead of a general anaesthetic. In your case it has been decided that PAE may be a better option for you.

Asking for your permission (consent)

The doctor who referred you should have discussed the reasons for this procedure and any other options with you.

You have been referred to a radiologist for this procedure. Radiologists are doctors who specialise in treatments using medical imaging. They will check that you understand why the procedure is being done, what the chances of success are, and the potential risks. You will then be asked to sign a consent form to confirm this. **You should feel that you have had enough explanation before you sign the consent form.**

If after talking with your hospital doctor or radiologist you do not want to go ahead with the procedure, then you can decide against it.

If the radiologist feels that your condition has changed or that your symptoms do not show that this procedure is needed, they will explain this to you and ask that you return to your referring doctor for review.

Important information

If you are taking medication that thins the blood (anticoagulants or antiplatelets):

Please contact the Radiology Department for advice using the telephone number on your appointment letter as soon as possible.

These drugs could include aspirin, warfarin, clopidogrel (Plavix®), apixiban (Eliquis), rivaroxaban (Xarelto) and ticagrelor (Brilinta) dalteparin and heparin.

You will be asked what blood thinning medication you are taking, how much you take (the dose), and what you are taking it for.

Contrast liquid:

The contrast liquid used to see your blood vessels on the X-rays contains iodine. This will be cleared by your kidneys in your pee (urine) or at your routine dialysis if you are dialysis dependent.

Please tell staff on arrival if you:

- are allergic to iodine, have any other allergies, or suffer from asthma.
- have ever reacted to an intravenous contrast liquid (the dye used for kidney X-rays, CT scans and X-rays of your heart and blood vessels).
- are on renal dialysis or have any problems with your kidneys.
- have diabetes.

Some patients get a warm feeling and a metallic taste when the contrast liquid injection is given, and sometimes may feel sick. This usually only lasts about 1 minute. Please let the staff who are with you know if you experience any of these. You may also have the feeling that you are passing urine, but not actually doing so. This is also normal.

A staff member will ask you questions about your health before the test starts.

How do I get ready for the procedure?

Do not eat for 4 hours before your procedure. You might be told that you can drink some water.

For most people, the procedure can be done as a day case, so you can go home the same day. Please bring an overnight bag with you so you have it ready if you do need to stay overnight.

What happens during the procedure?

Getting everything ready:

The procedure will be done in a special X-ray room. You will be asked to put on a hospital gown. You will be given a dose of oral antibiotics to minimise the risk of getting a urinary tract infection. You will lie on the X-ray table flat on your back. A small plastic tube (cannula) will be put into a vein in your arm so that you can be given medication such as painkillers. The radiologist may also give you a sedative to help you feel more relaxed. The sedative will not make you go to sleep. You will be attached to a blood pressure monitoring machine and have a small monitoring device (peg) attached to your finger to check your heart rate (pulse). You may also be given some oxygen.

Everything will be kept clean (sterile). Your skin will be cleaned with antiseptic and you will have some of your body covered with sterile sheets.

Local anaesthetic, placing the catheter and blocking the arteries:

You will have an injection of local anaesthetic, in the groin or wrist, which may sting a little for a few seconds until the area feels numb. A guide wire is put into the artery in your groin or wrist over which a thin plastic tube (catheter) is placed.

The radiologist will use an X-ray machine to take images of your prostate arteries. They will do this by injecting a liquid that shows up on X-rays (contrast liquid) down the catheter into the prostate arteries. This will show how they connect and their size and shape. It will show the arteries that are feeding your prostate and need treating. The injection may give you a warm feeling in the pelvis.

When everything is in the right place, the radiologist will inject fluid containing thousands of tiny particles through the catheter into these small arteries. These particles will block the small arteries feeding the prostate, cutting off its blood supply.

Repeating the procedure on the other side:

The radiologist will do the same procedure on the other side of your prostate. It can often all be done using the same catheter that is already in your wrist or groin. Sometimes we may need to put a new one in your other wrist or groin.

At the end of procedure:

At the end of the procedure the catheter is taken out. To prevent bleeding and bruising, the doctor will either press firmly on the entry point of your skin for about 20 minutes, or insert a plug device to seal the artery. If a plug device is used, further information about this will be given to you at the time.

How long will the procedure take?

Every patient is different and it is not always easy to know how complex or straightforward the procedure might be. You can expect to be in the department for about 2 to 3 hours.

What happens after the procedure?

You will be taken to a recovery area. Nursing staff will do routine checks, such as taking your pulse and blood pressure, to make sure that there are no problems. They will also look at the entry point on your skin to make sure there is no bleeding. After this you will be taken back to the ward until you are able to go home.

Most patients are able to go home the same day. Some patients will need to stay overnight. You will need another adult to travel home with you.

What aftercare advice should I follow at home?

You can eat and drink as normal.

Check the area on your skin where the catheter was put in (puncture site), regularly.

If you had sedation please follow the advice below:

For 12 hours: you must have another adult with you.

For 24 hours:

- do not drink alcohol.
- do not operate any machinery or do anything which needs skill or judgement.
- do not make important decisions or sign any documents.
- do not climb ladders.

For all patients - for 2 days after your procedure:

- do not drive a vehicle or ride a bike.
- do not do any strenuous exercise or heavy lifting.

For up to a week after the procedure you may feel very tired, although some people feel better after a few days. We advise that you rest for 1 week, after which you can go back to work and your normal activities.

If you have any problems after you have gone home please see your GP or call the NHS helpline on 111.

Are there any risks from this treatment?

As with any procedure or operation, complications are possible. We have included the most common ones below, although they are different for each person. Your risks will be discussed with you before you sign a consent form.

- **Bruising** - it is common to have a small bruise (haematoma) at the site of needle puncture into the artery. This will normally be sore and uncomfortable for a few days. If this becomes a large bruise there is a risk of infection and antibiotics may be needed.
- **If you notice a lump or swelling at the site of the needle puncture into the artery, you must apply pressure and call the NHS helpline on 111 or 999. Or call the Urology Emergency Admissions Unit on 0116 258 4247 - Monday to Friday, 9am to 5pm (outside of these hours call 0116 258 8293).**
- **Pain** - most patients feel mild pain afterwards which is controlled by simple painkillers.
- **Not being able to pee (pass urine)** - very occasionally some patients are unable to pee so cannot empty their bladder (urinary retention). This happens because the prostate can become more swollen immediately after the procedure, which can make passing urine temporarily more difficult. If this happens, a urinary catheter will need to be put into your bladder to empty it, until the swelling settles down.
- **Urinary tract infection** - there is a small risk of getting an infection. This is minimised by giving you a short course of oral antibiotics.
- **Blood in your pee or poo** - you may notice a very small amount of blood in your pee or poo. This should settle down by itself. If the bleeding becomes excessive and/ or you also have worsening pain and/ or a temperature, you should contact the NHS helpline on 111 or ward 23 at Glenfield Hospital on 0116 258 3700 urgently.
- **Damage to the bladder, rectum and genitals** (non-target embolisation) - there is a chance that the small particles used to block the prostate arteries go into nearby arteries and deprive normal tissue of its blood supply. In an attempt to avoid this happening, the doctor pays close attention to the pattern of the blood vessels in the pelvis on the X-ray pictures. Despite this there is a very small risk of injury to the bladder, rectum and genitals because they are very close to the prostate. These risks appear small and will be discussed with you before you sign a consent form.
- **Reaction to contrast liquid** - some patients may be allergic to the contrast liquid and may have symptoms such as feeling or being sick (nausea or vomiting), or a rash. If you develop these symptoms at home contact your GP or call the NHS helpline on 111.

How successful is this treatment?

Over 7 out of 10 men (70%) see an improvement in their symptoms after PAE. Their prostate becomes smaller and they are able to pee better (increase in urinary flow rate).

In about 1 in 10 men (10%) this procedure is not successful because the prostate arteries are too small or they bend in and out too much (tortuous). For some men, traditional TURP surgery may be offered.

When to get help

Please contact the Urology Emergency Admissions Unit (0116 258 4247, Monday to Friday - 9am to 5pm (outside of these hours call 0116 258 8293) if you get:

- new bleeding when you pee or poo.
- pain that is not controlled with painkillers.



Go to your nearest Emergency Department if you get:

- new symptoms in your legs such as pain or change in colour.
- increased swelling or bleeding from your groin.

What are the risks from X-ray radiation in this procedure?

The main risk from having X-rays is an increase in the risk of getting a cancer in the future. This risk is thought to be very small. We are all exposed to natural background radiation every day of our lives. This comes from the sun, food we eat, and the ground. Each examination gives a dose on top of this natural background radiation.

The benefits of this procedure are likely to outweigh any potential risk and the risk from not having the procedure could be greater. We will take all safeguards to minimise the amount of X-rays you receive.



What if I need to talk to someone?

If you have any questions or concerns, or cannot make your appointment please contact the Radiology Department on **0116 258 8765** (option 7), Monday to Friday, 9am to 5pm.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।

Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

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