



Having varicocele embolisation

This leaflet tells you about the procedure known as varicocele embolisation. It explains why it is performed, what it entails and the benefits and risks. If you have any other queries please call the Radiology Department on 0118 322 8368.

What is a varicocele and what is embolisation?

A varicocele is caused by an abnormality of the veins taking blood away from the testicle, resulting in the normal network of veins in the testicle to become dilated (swollen) and causing symptoms such as testicular ache or 'dragging'. It is similar to the process that causes varicose veins in the legs and is diagnosed with an ultrasound scan.

Varicocele embolisation is a minimally invasive, very low risk, procedure through a 'pin-hole' needle puncture in the neck (or groin) which enables the vein to be blocked, using either a special fluid or a small metal coil. This is effective in 75-80% of patients at treating their symptoms and avoids the need for an operation.

The procedure is usually carried out under local anaesthetic, although you can also be given a sedative if you prefer.

Are there any alternative treatments?

If a varicocele is not causing any symptoms and there are no issues of male infertility or low testosterone, then no treatment is necessary. Varicoceles are fairly common in the general population and do not cause a problem for the majority of men.

However, for men who experience persistent discomfort, or who have issues regarding male infertility, treatment to block the enlarged testicular vein is recommended. This may be by embolisation or surgery.

Surgery and embolisation have similar success rates; the main difference is in recovery times which are significantly shorter for embolisation. Embolisation also has fewer adverse events and is widely regarded as the preferred method to treat a varicocele, but if it is not possible then surgery is also a good alternative.

Where will the procedure take place?

The procedure will take place in a special procedure room within the X-ray Department and will be carried out by a doctor called an Interventional Radiologist.

Before you come in for this procedure you will have had a consultation with the doctor carrying out the embolisation when the ultrasound of your scrotum is repeated and you will have a discussion in detail about the procedure, giving you the opportunity to ask any questions.

Getting ready for the procedure

- The procedure is carried out on an outpatient basis – so no hospital stay is needed.
- You should not eat anything for at least six hours before the procedure, although you will be able to drink water up to two hours before.
- You will be required to stay for approximately one hour following the procedure and will need to be accompanied home with a responsible adult who will need to stay with you for 24 hours. You must not drive yourself to or from the hospital.
- The radiologist carrying out the procedure will explain what will happen to you and ask you to sign a consent form if you agree to go ahead.
- If you opt for sedation during the procedure then a thin plastic tube (cannula) will be placed in a vein in your hand or arm so that these can be administered.

What happens during the procedure?

- You will need to lie flat on the X-ray table during the procedure.
- The nurse looking after you will monitor your blood pressure, pulse and breathing during the procedure.
- The skin, usually in the right side of your neck, is numbed with local anaesthetic (similar to having a blood test). If you prefer, you can also be given a sedative and strong painkiller. This will cause you to become slightly drowsy, but not asleep, and may result in you having limited memory of the procedure.
- Once the local anaesthetic has taken full effect, a needle is inserted into the neck vein and a wire placed through it. Through this 'pin-hole', wires and very thin plastic tubes called catheters are navigated to the testicular vein that is causing the problem. Once correctly positioned, very thin flexible metal coils are placed which causes the vein to close permanently. The coils remain in place for life long and cause no long-term problems. Occasionally, a special fluid is also injected to help block off the veins.
- Once the procedure is finished the wires/catheters are removed. The puncture site is pressed for a short period to ensure there is no bleeding.
- You should not feel any significant pain during the embolisation but some people experience a slight discomfort. If you do feel any pain or become uncomfortable in any way during the procedure, tell the radiologist or nurse, who will be able to give you some sedation or pain relief.

How long will it take?

Generally, the procedure will take 30-60 minutes.

What happens after the procedure?

You will be taken into the recovery area in the X-ray Department and a nurse will monitor your observations and the puncture site.

When you have recovered sufficiently from the sedation and the interventional radiologist is happy for you to go home, you will be discharged into the care of your friend or relative.

You can carry on light activities on the day of the procedure, but avoid heavy lifting or vigorous exercise for 1 week. If you have had sedation, you must not drive for 24 hours.

Possible risks and complications

- It is common to experience some loin or lower abdominal pain for up to two weeks after the procedure. Regular painkillers, such as paracetamol and ibuprofen, will usually be effective.
- Very occasionally, there may be a small bruise, called a haematoma, around the puncture site in the neck. This will usually disappear over the next few weeks without further problem or need for treatment.
- Very rarely, the metal coils may end up into the wrong position, which will be apparent during the procedure and may require a separate procedure to reposition them.
- Currently, there is a 75-80% success rate with this procedure; however, there is always the possibility that the varicocele may return some months/years later. If this happens, the procedure may be repeated or you may be advised to have surgery.
- Despite these possible complications, the procedure is considered to be very safe and is usually carried out with no significant side effects at all.

Where can I find more information?

The Royal College of Radiologists has patient information for patients undergoing varicocele embolisation. www.rcr.ac.uk

To find out more about our Trust visit www.royalberkshire.nhs.uk

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

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