Testicular Vein Embolisation

Radiology
This leaflet tells you about the procedure known as a testicular vein embolisation. It explains what is involved and the possible risks.

**The benefits and risks of this procedure should already have been explained to you by your doctor. If you have any concerns about the procedure, you should discuss these with your consultant prior to being admitted. You will have an opportunity to ask the radiologist any other questions you may have. Please make sure you do this before you sign the consent form.**

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**The Radiology Department**

The radiology department may also be called the x-ray department or diagnostic imaging department. It is the facility in the hospital where radiological examinations of patients are carried out, using a range of equipment. This procedure will take place in the Interventional suite in the Radiology department.

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**Who does what?**

**Radiologists** are specialist doctors that have special expertise in using x-ray and scanning equipment, and also interpreting the images produced. They need to look at the images whilst carrying out the procedure.

They are supported by **specialist radiographers**, who are highly trained to carry out x-rays and other imaging procedures.

**Radiology nurses** are specialist nurses who will assist the radiologist and care for you throughout the procedure until you are handed back to the ward nurses, who will collect you from the Interventional Suite.

Prior to this procedure being performed, the radiologist will explain what is involved and you will have the opportunity to ask any questions you have regarding the procedure.

A written consent will be required. (You should have sufficient explanation before you sign the consent form)
What is a Testicular Vein Embolisation?

Your doctor has discovered that you have enlarged veins (varicocele) around your testicles that are causing you discomfort. To treat this, the vein needs to be deliberately blocked off. Before undertaking this treatment we will place a catheter (fine tube) into one of the veins in your neck. By injecting contrast medium (‘x-ray dye’) while taking x-rays, the catheter can be moved to the appropriate place to demonstrate the affected testicular vein.

Fine platinum wire coils specially made for the procedure are inserted into the vein via the catheter, causing the blood to clot around the coil and block off the vein.

Why do I need a varicocele embolisation?

Varicoceles can cause various problems, including infertility. In the past, an open operation would have been necessary to get rid of the varicocele, but now it can be treated by the technique of embolisation (blocking of the blood vessel).

Who has made the decision?

The consultant in charge of your case, and the radiologist carrying out the varicocele embolisation, will have discussed the situation, and feel that this is the best treatment option. However, you will also have the opportunity for your opinion to be taken into account and if, after discussion with your doctors, you do not want the procedure carried out, you can decide against it.

Do I need to do anything before the appointment date?

Please ring the Radiology department if you take Warfarin, Aspirin or Clopidogrel or anything that thins your blood. If you have Diabetes – Please phone and tell us.

If you are taking Metformin / Glucophage, we will need to modify your medication for two days after the procedure.
How do I prepare for testicular vein embolisation?

You need to be an inpatient in the hospital. You will have been allocated a day bed on either the Medical Day unit (MDU), Day Surgery Unit (DSU) or the Surgical Short Stay Unit (SSSU). The location will be written on the appointment letter accompanying this patient information leaflet.

You will be asked to **attend the ward three hours** prior to your appointment to allow bloods to be taken so the results are available before the procedure. **You will be asked not to eat for four hours** but you can drink water up to two hours prior to the procedure, unless otherwise advised.

You will be asked to put on a hospital gown and a small cannula (plastic tube) will be inserted in a vein on the back of your hand.

If you have any allergies, you **must** let the staff looking after you know. If you have previously reacted to intravenous contrast medium (the dye used for kidney x-rays and CT scans) then you must tell the radiographers.

Can I bring a relative or friend?

Yes, but for safety reasons, they will not be able to accompany you into the x-ray room, except in very special circumstances.

You will need to arrange for someone to collect you from the ward and drive you home after your required amount of bed rest, and for someone to stay with you overnight.

What actually happens during a testicular vein embolisation?

You will lie on the x-ray table, usually flat on your back. You may have a monitoring device attached to your chest and finger, and may be given oxygen through a mask. The radiologist will keep everything as sterile as possible, and will wear a theatre gown and operating gloves.

The skin on your neck will be swabbed with antiseptic, and then most of the rest of your body will be covered with a theatre towel.
The skin and deeper tissues over the vein will be anaesthetised with local anaesthetic, and then a needle will be inserted into the large vein in the neck under ultrasound guidance.

Once the radiologist is satisfied that this is correctly positioned, a guide wire is placed through the needle, and into the vein. The needle is then withdrawn allowing a fine plastic tube, called a catheter, to be placed over the wire and into the vein.

The radiologist uses the x-ray equipment to make sure that the catheter and the guide wire are moved into the right position into the varicocele, and then the wire is withdrawn. The radiologist can block the abnormal veins, either by injecting a special fluid down the catheter, or passing down small metal coils. These metal coils are like small springs, and cause the blood around them to clot, and consequently block the vein.

The radiologist will inject small amounts of special dye, called contrast medium, down the catheter, to check that the abnormal veins are being blocked satisfactorily. Once they are blocked completely, the catheter will be removed. The radiologist will then press firmly on the skin entry point for several minutes, to prevent any bleeding.

**Will the procedure be painful?**

When the local anaesthetic is injected, it will sting to start with, but this soon passes, and the skin and deeper tissues should then feel numb. After this, the procedure should not be painful.

There will be a nurse, or another member of staff, standing next to you and looking after you. If the procedure does become uncomfortable for you, then they will be able to arrange for you to have some painkillers through the cannula in your arm. You will be awake during the procedure, and able to tell the radiologist if you feel any pain, or become uncomfortable in any other way.

**How long will the procedure take?**

Every patient’s situation is different, and it is not always easy to predict how complex or how straightforward the procedure will be. Generally, the procedure will be over in about half an hour, but you may be in the x-ray department for about an hour or so.
What happens afterwards?

You will be taken back to your ward on a trolley or a bed. Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no untoward effects. They will also look at the skin entry point to make sure there is no bleeding from it. You will generally stay in bed for a few hours, until you have recovered. All being well, you will be allowed home on the same day.

Are there any risks or complications associated with this procedure?

Testicular vein embolisation is a very safe procedure, but there are some risks and complications that can arise. There may occasionally be a small bruise, called a haematoma, around the site where the needle has been inserted. If this becomes a large bruise, then there is the risk of it getting infected, and this would then require treatment with antibiotics.

Very rarely, some damage can be caused to the vein by the catheter, and this may need to be treated by surgery or another radiological procedure.

Unfortunately, there is always the possibility that although the varicocele seems to have been cured to start with, months or even years later, it may come back again. If this happens, then the procedure may need repeating, or you may be advised to have an operation. Despite these possible complications, the procedure is normally very safe, and is carried out with no significant side-effects at all.

Radiation is used during the procedure, but your consultant has decided that the benefits of having the procedure done are greater than any potential risk of exposure to radiation. The radiation dose you receive will be kept as low as possible.

What about after care?

Rest when you get home. Do not take up any strenuous tasks for a few days.

Avoid lifting anything heavy for 48 hours, while you are recovering from the procedure.
Return to work when you feel able. Depending on your occupation this could be as early as two days after the procedure. If you drive to work you need to be able to make an emergency stop safely.

What are the benefits of this procedure?

Reduction of the symptoms caused by varicocele.

Is there an alternative procedure?

Surgical ligation of the vessels “Tying off of the vessels”.

How do I get the results?

The radiologist will write a detailed report on the outcome of the procedure and send it to your consultant. Please make an appointment to see your consultant between two and four weeks after the procedure to discuss the results.

Privacy and dignity

Sometimes tests or procedures, although necessary, can be embarrassing or undignified for patients but we will endeavour to do everything we can to make you as comfortable as possible during your visit to the department.
Further information

For further information about Diagnostic Imaging Services at Royal Surrey County Hospital NHS Foundation Trust, please contact:

Royal Surrey County Hospital NHS Foundation Trust
Egerton Road
Park Barn
Guildford
Surrey
GU2 7XX

www.royalsurrey.nhs.uk

Reference source

■ The Royal College of Radiologists

Useful websites

■ For general information about radiology departments visit
  The Royal College of Radiologists’ website: www.goingfora.com

■ NICE website (www.nice.org.uk) has further information about
  NICE interventional procedure guidance
How to find the Radiology department

Royal Surrey County Hospital map
Level B (Ground floor)

Data sharing reference information is available on Royal Surrey County Hospital patient information leaflet entitled:

Your Healthcare records - your information PINXXXXXX-XXX
Contact details

If you have any questions or would like to know more about this procedure, please telephone the Interventional Suite Radiology Department on:

**01483 571122** Extension **4596**

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Royal Surrey County Hospital (RSCH) NHS Foundation Trust fully subscribes to the National Patient Safety Agency (NPSA) *Being Open* best practice framework, November 2010.

**PALS and Advocacy contact details**

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located in far left corner as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

**Telephone:** 01483 402757

**Email:** rsc-tr.pals@nhs.net

**Opening hours:** 9.00am–4.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.