

# Varicocele Embolisation

## Introduction

This leaflet tells you about the procedure known as varicocele (pronounced VARI-CO-SEAL) embolisation. It explains what is involved and what the possible risks are. It is not meant to be a substitute for informed discussion between you and your doctor, but can act as a starting point for such a discussion.

Whether you are having the varicocele embolisation as planned or as an emergency procedure you should have sufficient explanation before you sign the consent form.

## What is a varicocele embolisation?

A varicocele is an abnormality of the veins that take blood away from the testicle. The veins become bigger and more obvious, rather like varicose veins in the leg. Embolisation is a way of blocking these veins, and therefore making them less obvious and causing the varicocele to disappear, without an operation.

## Why do I need a varicocele embolisation?

Varicoceles usually do not cause any problems and most men are not aware they have one, but occasionally they can ache and can rarely lead to reduced fertility. 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.

## Who has made the decision?

The consultant in charge of your case, and the radiologist performing 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.

## What are the options or alternatives?

The only alternative is an open operation.

## Who will be performing the varicocele embolisation?

A specially trained doctor called a radiologist. Radiologists have special expertise in using x-ray equipment, and also in interpreting the images produced. The radiologist will look at these images while carrying out the procedure.

Radiographers and radiology nurses will be present in the room to assist during the procedure, they will introduce themselves at the start of the procedure.

Occasionally student radiographers or medical students will be present to observe the procedure.

## Where will the procedure take place?

Generally in the Medical Imaging Department, in a special 'screening' room, which is adapted for specialised procedures.

## How do I prepare for varicocele embolisation?

- This will be done as a day case procedure, only rarely would you need to stay overnight.
- You will have had some blood tests performed before the procedure to check that you do not have an increased risk of bleeding.
- You are asked not to eat for 4 hours prior to the procedure. You may drink a little water.
- You will need someone to drive you home and to look after you for 24 hours.
- You should be prepared to stay overnight if necessary.
- If you have any allergies or you have previously reacted to intravenous contrast medium, you must let the doctor know. Intravenous contrast medium is the injection we give you during some scans.
- If you are diabetic, please contact the Medical Imaging Department on **01392 402336 selecting option 2, in-patient enquiries, option 6 X-ray Special Procedures.**
- If you normally take any medication to thin your blood (anticoagulation or antiplatelet drugs) such as: **warfarin / clopidogrel / aspirin / non-steroidal anti-inflammatory drugs (NSAIDs / brufen / ibrufen / nurofen / dabigatran (Pradaxa) / rivaroxiban (Xarelto) / Apixaban (Eliquis) / phendione / acenocoumarol – then these may need to be stopped or altered. Please contact the Medical Imaging Department on 01392 402336 selecting option 2, in-patient enquiries and then option 6 for X-ray Special Procedures.**
- Other medication should be taken as normal.

## What actually happens during varicocele embolisation?

You will lie on the x-ray table, generally flat on your back. You need to have a needle put into a vein in your arm, occasionally the radiologist will give you a sedative or painkillers.

You may also have a monitoring device attached to your chest and finger. The radiologist will keep everything as sterile as possible, and may wear a theatre gown and operating gloves. The skin near the point of insertion, probably the groin, will be swabbed with antiseptic, and then most of the rest of your body 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 groin.

Once the radiologist is satisfied that this is correctly positioned, a guide wire is placed through the needle, and into the vein. Then the needle is 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 it hurt?

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 needle 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 it 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 Medical Imaging Department for about an hour or so.

## What happens afterwards?

You will be observed in the department for a period of a couple of hours and if all is well discharged home.

## What will happen to the results?

A report of the procedure will be recorded in your notes immediately and also sent to your specialist within 48 hours.

## Are there any risks or complications?

Varicocele 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, and this is quite normal. 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.

## Finally...

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Do satisfy yourself that you have received enough information about the procedure, before you sign the consent form.

## Contact us

If you found reading your leaflet difficult, you do not understand what it means for you, if you have any queries or concerns you can contact us on: 01392 402336 and we can talk it through.

## How to get to the Royal Devon & Exeter Hospital at Wonford

**Please refer to the enclosed "Welcome to the Medical Imaging Department" leaflet or use the Trusts website for the latest information:**

**[www.rdehospital.nhs.uk/our-sites](http://www.rdehospital.nhs.uk/our-sites)**

For more information on the Medical Imaging Department, please visit our website:

**[www.rdehospital.nhs.uk/services/medical-imaging-radiology-x-ray](http://www.rdehospital.nhs.uk/services/medical-imaging-radiology-x-ray)**

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