

Varicocele (pronounced vari-co-seal) Embolisation

Introduction

This leaflet tells you about the procedure known as varicocele embolisation, 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.

The varicocele embolisation is likely to be done as a pre-planned procedure, and you should have had plenty of time to discuss the situation with your consultant and the radiologist who will be doing the procedure, and perhaps even your own GP, before you sign the consent form. Do make sure that you have had sufficient explanation about what is involved, 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 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.

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, then you can decide against it.

Who will be performing the varicocele embolisation?

A specially trained doctor called an Interventional Radiologist. Radiologists have special expertise in using x-ray equipment, and also in interpreting the images produced. They need to look at these images while carrying out the procedure. Interventional Radiologists have additional specialist expertise in handling and manipulating catheters inside the body and are, therefore, the most appropriate specialists to be undertaking this type of procedure.

Where will the procedure take place?

Generally in the x-ray department, in a special "interventional radiology" room, this is adapted for specialised procedures.

How do I prepare for varicocele embolisation?

This procedure can usually be undertaken as an outpatient. You will probably be asked not to eat for four hours beforehand, though you may be told that it is alright for you to drink some water.

You may receive a sedative to relieve anxiety. You will be asked to put on a hospital gown. As the procedure is generally carried out using the big vein in the groin, you may be asked to shave the skin around this area. If you have any allergies, you must let your doctor know. If you have previously reacted to intravenous contrast medium, the dye used for kidney x-rays and CT scanning, then you must also tell your doctor about this.

What actually happens during varicocele embolisation?

You will lie on the x-ray table, generally flat on your back. You may need to have a needle put into a vein in your arm, so that the radiologist can give you a sedative or painkillers if necessary. You may also have a monitoring device attached to your chest and finger, and may be given oxygen through a small tube in your nose. The radiologist will keep everything as sterile as possible, and **will** wear a theatre gown and operating gloves. The skin near the point of insertion, 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 by 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 off, 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 nearby 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 x-ray department for about an hour or so.

What happens afterwards?

You will be asked to stay flat on a trolley for about an hour. Nurses 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 be allowed home on the same day, providing there are no unforeseen complications.

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. At any stage you can withdraw consent, even after you have signed the consent form.

Varicocele embolisation is considered a very safe procedure, designed to prevent you having a larger operation. There are some slight risks involved and, although it is difficult to say exactly how often these occur, they are generally minor and do not happen very often.

Sources of information

This leaflet is based on information from the Clinical Radiology Patients Liaison Group (CRPLG) of The Royal College of Radiologists and the British Society of Interventional Radiology (BSIR) who have given their permission for it to be reproduced.

For further information on this condition visit **www.varicoceles.com**

Important information

Please remember that this leaflet is intended as general information only. It is not definitive. We aim to make the information as up to date and accurate as possible, but please be warned that it is always subject to change. Please, therefore, always check specific advice on the procedure or any concerns you may have with your doctor.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team on 01323 417400 Ext: 5860 or by email at: **esh-tr.patientexperience@nhs.net**

Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 01424 755255 Ext: 2620

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

The following clinicians have been consulted and agreed this patient information:

Dr Giles; Consultant Radiologist, Dr Mo Faris; Consultant Radiologist, Dr Neal Barlow;
Consultant Radiologist

The directorate group that have agreed this patient information leaflet:

Julia Barbour; Specialist Matron, Interventional Radiology, Dr Justin Harris; Consultant Radiologist

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Responsible clinician: Tracianne Walter; Specialist Sister, Radiology

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