

**Information for Patients
undergoing
Varicocele Embolisation**

Department of Radiology

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 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, you can decide against it.

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.

Where will the procedure take place?

Generally in the x-ray department, in a special 'screening' room, which is for specialised procedures.

How do I prepare for varicocele embolisation?

You need to be an inpatient in the hospital. 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 a vein in the side of your neck.

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 scans), 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 need to have a needle put into a vein in your arm, so that the radiologist can give you a sedative or painkillers.

You may also have a monitoring device attached to your chest and finger, and may be given oxygen through small tubes in your nose. 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, usually the neck, (but occasionally your 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 vein in your neck.

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 x-ray department for about an hour or so.

What happens afterwards?

You will be taken back to your ward on a trolley. 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. You may be allowed home on the same day, or kept in hospital overnight.

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.

For further information contact:-

Radiology Nurses on:- 01633 - 234327
Radiology Department, Royal Gwent Hospital

British Society of Interventional Radiology (BSIR) and the Clinical Radiology Patients' Liaison Group (CRPLG) of the Royal College of Radiologists.

Radiology Info.org - a link from the BSIR website.