

Information for patients having a varicocele (pronounced *vari- co-seal*) embolisation.

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 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 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. They need to 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 adapted for specialised procedures.

How do I prepare for varicocele embolisation?

You need to be an in-patient in the hospital. You will probably be asked not to eat for four hours beforehand though you may be told that it is all right 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 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 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 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 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.

What are the benefits?

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.

What are the alternatives?

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. 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.