

# Having a Varicocele Embolisation

## Patient leaflet

**If you need this leaflet in a different language or accessible format  
please speak to a member of staff who can arrange it for you.**

اگر به این بروشور به زبان دیگر یا در قالب دسترس پذیر نیاز دارید،  
لطفاً با یکی از کارکنان صحبت کنید تا آن را برای شما تهیه کند.

Jeśli niniejsza ulotka ma być dostępna w innym języku lub formacie,  
proszę skontaktować się z członkiem personelu, który ją dla Państwa przygotowuje.

Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil,  
vă rog să discutați cu un membru al personalului să se ocupe  
de acest lucru pentru dumneavoastră

如果您需要本传单的其他语言版本或无障碍格式，请联系工作人员为您安排。

إذا احتجت إلى هذه النشرة بلغة أخرى، أو بتنسيق  
يسهل الوصول إليه، يرجى التحدث إلى أحد الموظفين لترتيب ذلك لك.

# Introduction

This leaflet tells you about having varicocele embolisation. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor but can act as a starting point for such discussions. If you have any questions about the procedure, please ask the doctor who has referred you or the department which is going to perform it.

## What is a varicocele embolisation?

A varicocele is an abnormality of the veins that take blood away from the testis. The valves in the veins do not work properly and so the veins become bigger and more obvious, rather like varicose veins in the leg. Embolisation is an X-ray guided treatment, which blocks the enlarged vein from the testis typically using coils and allows the veins to shrink.

## Why do you need an embolisation?

A varicocele can cause discomfort in the scrotum, which is often worse when standing, exercising, or cycling. They are sometimes diagnosed during the investigation of infertility and treatment may help your sperm count. There are a number of ways to treat varicoceles including open groin surgery, laparoscopic surgery as well as minimally invasive interventional radiology. Interventional radiology uses X-rays to guide a small tube to the vein to block it with only a small 3–4 mm incision in the neck and sometimes the groin. It is performed as a day case procedure.

## Who has made the decision?

The consultant in charge of your care, normally a surgeon or infertility expert and the interventional radiologist performing the procedure have discussed your case and feel that this is the best option. However, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctors, you no longer want the procedure, you can decide against it.

# What to expect

## Where will the procedure take place?

The procedure will take place in the Radiology department in a special “screening room” design specially for this type of procedure. This is similar to an operating theatre into which specialised X-ray equipment has been installed.



## Who will you see?

A specially trained team of radiographers and nurses led by an interventional radiologist within the radiology department. Interventional Radiologists have special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment. As the procedure takes place in a sterile setting all staff members will be wearing scrubs. All members of the team will introduce themselves



## Preparation

A varicocele is carried out as a day case procedure under local anaesthetic. You will have had some pre procedure blood tests performed beforehand and on the day of your procedure you are asked to not eat for 4 hours, although you may still drink clear fluids such as water. If you are taking any blood thinning medications, you will be given instructions when to stop these before your procedure.

# Procedure information

## What happens during embolisation?

Before the procedure, the interventional radiologist will explain the procedure and ask you to sign a consent form. Please feel free to ask any questions that you may have and, remember that even at this stage, you can decide against going ahead with the procedure if you so wish. You will be asked to get undressed and put on a hospital gown.

A small cannula (thin tube) may be placed into a vein in your arm, so that a sedative or painkillers can be given if required. You will lie on the X-ray table, generally flat on your back. You will have monitoring devices attached to your chest and finger and may be given oxygen.

The procedure is performed under sterile conditions and the interventional radiologist and radiology nurse will wear sterile gowns and gloves. The skin near the point of insertion, usually the neck but occasionally the groin, will be cleaned with antiseptic and you will be covered with sterile drapes.

The skin and deeper tissues over the vein will be numbed with local anaesthetic and then a fine tube (catheter) will be inserted and guided, using the X-ray equipment, into position down the testicular vein (which takes blood away from the testis). The interventional radiologist will block this vein usually by inserting small metal coils, which look like springs and will remain in the abnormal vein.

The interventional radiologist will inject small amounts of dye (contrast agent) to check the position of the catheter and that the abnormal veins are blocked satisfactorily. Once they are blocked, the catheter will be removed. The interventional radiologist will press firmly on the skin entry point for a few minutes to prevent any bleeding and a dressing applied.

## Will it hurt?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. You may have a small bruise after the procedure. You may also feel a warm sensation for a few seconds when the dye is injected and feel like you are passing urine. After this, the procedure should not be painful.

## How long will it take?

Every patient is different and it is not always easy to predict; however, expect to be in the radiology department for about an hour.

## What happens afterwards?

You will be taken back to your ward. Nursing staff will carry out routine observations including pulse and blood pressure and will also check the treatment site. You will generally stay in bed for a couple of hours and then you will be able to go home. It is advisable not to drive after the procedure. Take it easy for the rest of the day but you can resume normal activities the next day, please however avoid any strenuous exercise or heavy lifting for 5-7 days.

# Risks

## Are there any risks?

Varicocele embolisation is a very safe procedure, but as with any medical procedure 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 into the vein. This will go away in a week or two.

A few patients may experience mild discomfort in the loin or scrotum afterwards which rarely lasts more than a few days and can be treated with over the counter pain relief.

There is a very small risk that a coil, used to occlude the vein, could migrate to your lungs. If this happens and it cannot be retrieved it is very unlikely to cause any problems other than a cough and mild chest pain for a few days.

Rarely it may not be possible to obtain a satisfactory position for embolisation, in which case a surgical operation may be offered. Unfortunately, there is a possibility that the varicocele may come back again however this may also happen after either surgical or embolisation treatment (approximately 10%). If this happens, then the procedure could be repeated if you wish.

## Radiation

Having a varicocele embolisation involves the use of radiation. Any examination using radiation is only performed when strictly necessary and it is felt the benefits of the examination outweigh any potential risks. All imaging is performed using the minimum amount of radiation necessary, and is individualised for each patient depending on the size of the patient and the condition being investigated.

For more information on radiation please see the link below:  
<https://www.ukhsa-protectionservices.org.uk/radiationandyou/>

## Extravasation

Occasionally when you are having a contrast (dye) enhanced procedure there is a small risk that the injection of contrast can leak out of the vein and under the skin. This is called an extravasation. We find this occurs in 1 out of 200 injections. If this does happen then further advice will be given to by the Radiographer and Radiologist at the time of the procedure.

## Risks continued...

### Injection of X-ray contrast (dye)

If you have had an allergic reaction to iodine or the X-ray contrast (dye) in the past, then you must tell us prior to, or on arrival for, your appointment.

The contrast (dye) used during the procedure contains iodine. There are risk factors associated with injections of X-ray contrast (dye), which can be increased by certain conditions.

We will complete a safety questionnaire to check your suitability to have the X-ray contrast (dye). The risk of serious allergic reaction to contrast materials that contain iodine is extremely rare, and radiology departments are well equipped to deal with them. The injection usually causes nothing more than a warm feeling passing around your body, a metallic taste in your mouth and a sensation of passing water. These effects will pass within a few minutes.

Table 1: Types of allergic reaction to Contrast (X-ray Dye)

Category	Type
Mild	Minor rash, redness, Swelling of the skin, Mild nasal congestion, sneezing, runny nose. Mild high blood pressure, nausea, Mild vomiting.
Moderate	Generalised redness Marked rash, Itching, and swelling of the skin, Hoarseness or throat tightness, Fainting Swelling of face and throat.
Severe	Respiratory arrest Cardiac arrest Fluid on the lung Seizures Cardiogenic shock The risk of death is extremely rare.

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## Notes

## Finally

The pictures taken during the examination are studied carefully and a detailed report is produced. The results will be sent to the person who referred you for the test. They will discuss the results with you and any treatment you may need.

You may already have an appointment with the team who referred you. If not, please contact them to arrange one to discuss the results of this test.

If you have any further questions, please do not hesitate to call the Radiology department via the number given on your appointment letter.

As this is a teaching hospital there may be students and observers present during your examination as part of their ongoing training. Please let the staff know if you do not wish any students to be present during your attendance.

Whiston Hospital  
Warrington Road,  
Prescot,  
Merseyside,  
L35 5DR  
Telephone:  
0151 426 1600

St Helens Hospital  
Marshall Cross Road,  
St Helens,  
Merseyside,  
WA9 3DA  
Telephone:  
01744 26633

Southport Hospital  
Town Lane,  
Kew,  
Southport,  
Merseyside,  
PR8 6PNT  
Telephone:  
01704547471

Ormskirk Hospital  
Wigan Road  
Ormskirk,  
L39 2AZ  
Telephone:  
01695 577111