



**Imaging**



**Brighton and Sussex  
University Hospitals**  
NHS Trust

# Having a Testicular (Varicocele) Embolisation

Information for patients

## What is a Varicocele?

A varicocele is an abnormality of the veins that take blood away from the testicle. A series of one way valves in the vein prevent the reverse flow of blood back to the testicles. These one way valves sometimes fail, and the reverse flow of blood stretches and enlarges the tiny veins around the testicle which causes a varicocele. These are similar to varicose veins in the leg.

Sometimes varicoceles cause no symptoms and are harmless. Occasionally, varicoceles can cause discomfort in the scrotum, aching pain, or infertility.

## What is a Varicocele Embolisation?

This is a procedure to treat varicoceles. It is a sterile procedure performed under x-ray guidance, in which the vein draining your testicle is blocked with a number of small metallic coils. The procedure is done as a day case in the Interventional Radiology (IR) department. This means you will come to the hospital, have your procedure and will return home a few hours later, on the same day.

## Why do I need a Varicocele Embolisation?

Varicoceles can cause problems, including pain and infertility. In the past, an open operation would have been necessary to treat the varicocele but now it can be treated by the technique of embolisation.

## Who has made the decision?

The doctors, generally the Urologist in charge of your case and the Interventional Radiologist (the doctor who specialises in Imaging procedures) will have discussed your case and recommend this as the next step. However, if after discussion you do not want the procedure then you can decide against it.

## Who will be doing the Embolisation?

A specialist doctor called an Interventional Radiologist. Radiologists are experts in using X-ray equipment and in microsurgical techniques.

## Where will the procedure take place?

In the Imaging Department, in a special Interventional Radiology (IR) Procedure Room which is designed for these specialised procedures. You will be checked into the department by a nurse, who will ask some medical questions and fill out some paperwork. The Interventional Radiologist will then come and talk to you about the procedure, and you will have the opportunity to ask any questions or raise any concerns. Only if you are happy to continue with the procedure will you be asked to sign the consent form.

## What actually happens during the Varicocele embolisation?

It is performed in the IR procedure room. You will lie on a special x-ray table on your back and be covered with sterile drapes.

- Your groin or neck area will be cleaned with an antiseptic solution. The Interventional Radiologist will talk with you about which area he or she plans to use when you consent to the procedure.
- Local anaesthetic will be injected to numb the area to stop you feeling pain. When the area is numb, a thin tube (catheter) is positioned into the vein using x-ray guidance.
- Contrast (x-ray dye) is injected into the catheter and viewed on an x-ray screen. This confirms that it is in the right position.
- Small, metallic coils are then used to block off the testicular vein. Once the procedure is complete, the radiologist removes the catheter and will press gently on the entry site. This prevents bleeding. The procedure usually takes between 40 minutes and an hour.

In a few cases the radiologist can't get to the relevant vein. If this happens the radiologist will not be able to proceed and will need to consider an alternative for a later date which they will discuss with you.

## How do I prepare for a Varicocele Embolisation?

To prepare for the procedure you will need to make sure you do the following:

Please let us know if you are taking any **antiplatelet medicines** (for example, Aspirin, Clopidogrel) or any **medicines that thin the blood** (for example, Warfarin), as these may need to be withheld temporarily

before the procedure. Call the IR department for advice as soon as you get your appointment letter on **01273 696955 Ext. 4240/4278** and ask to speak to one of the IR nursing team.

If you are taking **medicines for diabetes** (for example metformin) or using insulin, then these may need to be altered around the time of the procedure. Call the IR department on the numbers above for advice as soon as you get your appointment letter.

You cannot eat or drink anything (except water) for four hours before your procedure. You can drink water up to two hours before your procedure.

You will need a responsible adult to take you home.

## Will it hurt?

When the local anaesthetic is injected it will sting for a moment but the stinging will wear off leaving the area of skin numb.

After this the procedure should not be painful however if you feel discomfort there will be a nurse with you who will be able to arrange for further anaesthetic or sedation, if it is required. After the contrast medium (x-ray dye) is injected you will get a warm sensation in your pelvic area.

## How long will it take?

Whilst every patient and every patient's situation is different we allow an hour for the procedure.

## What happens afterwards?

You will be required to recover in our recovery area either on a trolley or chair and will stay in the department for 1-2 hours after the procedure. The nurses will carry out routine observations, blood pressure, pulse and monitoring of the skin entry point, to ensure there is no bleeding.

Please arrange for someone to pick you up and take you home and remain with you for 24 hours following the procedure, as you **must not drive or use public transport or be at home alone.**

## What are the risks?

Despite the possible complications the procedure is normally very safe. However, the following side effects may occur:

- Bruising in the groin area or neck area depending upon where the catheter was inserted. This is very rare and usually resolves within a few days.
- You may experience dull aching in the groin or lower back. This usually lasts for a couple of days and you can take over-the-counter painkillers (follow the instructions on the packet).
- Some damage to the vein, caused by the catheter (this is very rare). This may need to be treated by surgery or another radiological procedure.

There is always the possibility that although the varicocele seems to have been cured, months or even years later it may reoccur. If this happens then the procedure may need repeating or you may be advised to have an operation.

The Radiologist will discuss all risks with you before the procedure and you can decide if you want to proceed during then.

## What are the benefits?

- A varicocele embolisation works as well as surgery to relieve the symptoms of varicoceles
- You do not need to have a general anaesthetic to have embolisation. Having a general anaesthetic carries more risk. Infection is very rare after embolisation and there is a lower rate of complications compared to having surgery.
- It can be carried out as a day case procedure, so you do not have to stay in hospital overnight.

## Afterwards

Typically, patients are observed for a couple of hours either on a stretcher or in a chair and go home the same day.

- You will need to rest for the remainder of the day, and possibly the next day depending on your recovery. You can then resume your normal activities but should avoid heavy lifting for 48 hours.
- You will need to have a responsible adult to take you home.
- Continue with your normal medication as prescribed, but if you take **metformin** tablets please do not take them for the next two days.

**If you feel you need urgent medical attention or are worried about anything** please contact the IR department Monday - Friday 9am - 5pm, your GP, or go to your nearest A&E department.

## 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 team looking after you.

**Make sure you are satisfied that you have received enough information about the procedure before you sign the consent form.**

**Interventional Radiology:  
01273 696955 Ext. 4240/4278**

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### Disclaimer

The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.

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