



## Diagnostic Imaging Department

# Varicocele Embolisation

This leaflet tells you about the procedure varicocele embolisation. It explains what is involved and what the possible risks are.

### What is a varicocele embolisation?

A varicocele is a swelling in the scrotum caused by dilatation of the veins that normally take blood away from the testicle. The veins become bigger and more obvious over time and, as they do, symptoms such as pain or a dragging sensation can develop. Embolisation is a way of blocking these veins and causing the varicocele to disappear, without the need for open surgery.

### Why do I need a varicocele embolisation?

Varicoceles can cause various problems including:

- A 'heavy' sensation or the feeling of a lump within the scrotum. Varicoceles can become more prominent on standing and at the end of the day.
- Pain; often described as a discomfort or aching sensation.
- Infertility; if you have a varicocele this can possibly increase the chance of infertility although there is no guarantee that treating a varicocele will improve fertility.

### Who will be performing the procedure?

A doctor called an Interventional Radiologist who has been specially trained in performing procedures using x-ray and scanning equipment.

### Where will the procedure take place?

In the x-ray department in a 'special procedures room'.

### Is there any preparation?

Your consultant will refer you to the x-ray department for an ultrasound scan of your testicle. Your scan will be a few weeks before your varicocele embolisation procedure.

If you are taking anti-coagulants e.g. warfarin, clopidogrel, apixaban or rivaroxaban, you may be required to stop taking them prior to the procedure. Please contact the Radiology Nurses on 01305 255276 to inform them if you take this medication.

You can continue to eat and drink on the day of your procedure.

## **Consent**

Informed consent will be obtained prior to the procedure. Staff will explain all the risks, benefits and alternatives before asking you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to speak with a senior member of staff.

## **What happens during the procedure?**

You will be admitted to hospital for the procedure.

The interventional radiologist will explain the procedure to you before asking you to sign the consent form.

You will need to lie on your back on the x-ray table.

A nurse will attach a monitor to your chest, arm and finger so your blood pressure, pulse etc can be recorded.

The skin over the groin or neck will be cleaned with an antiseptic solution and a sterile drape will be laid over you, to help avoid infection. The choice of which route to use (via the groin or neck) will be decided by the interventional radiologist on the day of the procedure. The decision made may be because of the anatomy of your blood vessels or preference of the interventional radiologist.

A local anaesthetic will be injected into your skin and deeper tissues. It will sting for a few seconds before the area goes numb. You will still be able to feel touch and pressure in the area where the interventional radiologist is working.

The interventional radiologist will use an ultrasound machine to help see the blood vessels so a needle can be inserted into a vein in the groin or neck followed by a small plastic tube that will stay in the vein whilst the procedure is being performed.

A catheter and guide wire will be placed through the plastic tube, and using the x-ray machine these are positioned into the vein leading to the varicocele. The abnormal veins can then be blocked by passing small metal coils down the catheter. These metal coils are like small springs and cause the blood around them to clot, which blocks the vein. The coils will stay in permanently but you will not be able to feel them. X-ray dye, called contrast medium, will be injected into the catheter to check that the abnormal veins are blocked satisfactorily. Once they are blocked completely, the catheter will be removed. The interventional radiologist will then press firmly on the skin at the entry point for several minutes, to prevent any bleeding.

## **How long will it take?**

Every patient is different. The procedure generally takes about an hour.

## **Will it hurt?**

You will feel stinging as the local anaesthetic is injected, this will soon pass and the skin and deeper tissues should feel numb.

You will be awake during the procedure and able to tell the monitoring nurse if you feel pain or become uncomfortable.

You may experience initial swelling and discomfort of your testicle following the procedure for a day or two. This is normal and can be treated with simple over the counter pain relief.

## **What happens afterwards?**

You will be taken back to the ward on a bed. Nursing staff will monitor your blood pressure, pulse, temperature etc., to make sure there are no problems. The skin at the incision site will be observed to make sure there is no bleeding from it. You will stay in bed for a few hours, until you have recovered, after which time you will be allowed home.

You may eat and drink normally.

There will be a small dressing covering the entry site. This can be removed after 48 hours.

## **You must:**

- Have a responsible adult to collect you, as you cannot drive home or travel on public transport.
- Have someone to stay with you for the first night just in case your wound bleeds or you feel unwell.
- Have access to a telephone.

## **What are the risks and complications?**

Varicocele embolisation is a common and safe procedure but, as with any medical treatment, there are some risks and complications that can occur, although significant complications are rare.

There may be bruising at the incision site but this will subside over the next few days.

The metal coils used to block the abnormal veins can lodge in the wrong position. If this happens during the procedure, it will be seen using the x-ray equipment and the coil can usually be repositioned or retrieved.

Damage can be caused to the vein by the catheter which may lead to mild discomfort for 2-3 days.

There is an extremely small risk of experiencing a reaction to the x-ray dye. If you have had previous reactions to x-ray dye then please tell the x-ray staff prior to the procedure.

There is the possibility that the varicocele may come back again, months or even years later. If this happens, the procedure may need to be repeated or you may be advised to have an operation.

### **Will I need further treatment?**

If the procedure is technically successful then it is likely that no further treatment will be required. No routine follow-up will be arranged.

### **Contact Numbers:**

We hope that you have found this information useful. If you have any questions or are worried about anything, please contact your referring consultant or family doctor (GP).

To contact your referring consultant, please call:

Dorset County Hospital on 01305 251150 and ask for the secretary of your consultant or

Urology Nurses: 01305 255145 or Radiology Sister: 01305 255276

### **About this leaflet:**

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If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email [pals@dchft.nhs.uk](mailto:pals@dchft.nhs.uk)



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