

# Varicocele Embolisation

An information guide



# **Varicocele Embolisation**

## **Introduction**

The aim of this leaflet is to provide you with information to help you understand more about having a varicocele embolisation. It explains what is involved and the possible risks. 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 using a spring (a coil) 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 and minimally invasive interventional radiology. Interventional radiology uses X-ray equipment to guide a small tube to the vein to block it. It is performed as a day case procedure.

## What are the benefits and risks of embolisation?

### Benefits

- No surgical incision is needed - only a small nick in the skin that does not have to be stitched closed
- The recovery time is shorter with embolisation than with surgery
- There is a 90% success rate with embolisation, which are the same results as those achieved with more invasive surgical techniques.

### Risks

- Any procedure where the skin is penetrated carries a risk of infection. The chance of an infection requiring antibiotic treatment appears to be less than one in a thousand.
- There is a very slight risk of an allergic reaction if contrast material (x-ray dye) is injected .
- Any procedure that involves the placement of a catheter inside a blood vessel carries certain risks. These risks include damage to the blood vessel, bruising or bleeding at the puncture site, and infection.
- There is a very small chance that the coil which is used to block the vein can lodge in the wrong place. If this happens the coil can usually be retrieved. If the coil lodges in the lung and cannot be retrieved, it is unlikely to cause any problems other than a cough and mild chest pain for a few days.
- Other possible complications include lower back pain, inflammation within the scrotum (epididymitis) and phlebitis.
- In five to ten per cent of these procedures, the varicocele will return. This rate is similar to that of more invasive surgical procedures.

**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.

**Are you required to make any special preparations?**

Varicocle embolisation is usually carried out as a day case procedure under local anaesthetic. The ward or Day Service Unit member of staff will ask you to put on a hospital gown. A small, thin plastic tube called a cannula will be inserted into a vein in your hand or arm.

If you have any allergies or have previously had a reaction to the dye (contrast agent) which is used in X-ray departments, you must tell the radiology staff before you have the procedure.

**Where will the procedure take place?**

The procedure will take place in the intervention suite of the radiology department. This is similar to an operating theatre in which specialised X-ray equipment has been installed.

**Who will see you?**

You will be seen by a specially trained team led by an interventional radiologist (a doctor) and including radiology nurses and radiographers. Interventional radiologists have special expertise in reading images and in using X-ray imaging to guide catheters and wires to aid diagnosis and treatment.

## **What happens during embolisation?**

You will be taken to the radiology department where the staff will introduce themselves and check your details. The interventional radiologist will ask you to confirm that you have already had the procedure explained to you and will ask you to sign the final part of the consent form. Please feel free to ask any questions that you may have and even at this stage you can decide against going ahead with the procedure, if you so wish.

You will lie on the X-ray couch, generally flat on your back. A sedative or painkillers can be given if required. You may have a monitoring device attached to your finger to check your pulse and a blood pressure cuff around your upper arm. You may be given oxygen through a small tube placed into your nostrils.

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, either in the groin or the neck, will be swabbed with antiseptic and you will be covered with sterile drapes.

The skin and deeper tissues over the vein in your neck or groin will be numbed with local anaesthetic, and then a fine tube (catheter) will be inserted and guided, using the X-ray equipment, into position in 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 which will remain in the abnormal vein. The 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.

## **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 at the skin entry point after the procedure. You may 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 the Day Services Unit or your ward. Nursing staff will carry out routine observations including pulse and blood pressure and will also check the puncture site (your neck or groin).

You will generally stay in bed for a couple of hours and then you will be able to go home. Take it easy for the rest of the day but you can resume normal activities the next day.

You may experience some aching in the testicle for a couple of days but after this there should be no pain at all.

## **Further information**

More information is available on the British Society of Interventional Radiology website; [www.bsir.org/patients/varicoceles](http://www.bsir.org/patients/varicoceles)

Your specialist consultant who has requested this procedure for you will probably have already explained the reasons why you need to have this done and we hope that this information guide has also been useful to you. However, if you are still uncertain, then please contact his/her secretary via the hospital switch board (0161 795 4567).

## **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. Make sure that you are satisfied that you have received enough information about the procedure.

**If English is not your first language and you need help, please contact the Interpretation and Translation Service**

Jeśli angielski nie jest twoim pierwszym językiem i potrzebujesz pomocy, skontaktuj się z działem tłumaczeń ustnych i pisemnych

اگر انگریزی آپ کی پہلی زبان نہیں ہے اور آپ کو مدد کی ضرورت ہے تو ، براہ کرم ترجمانی اور ترجمہ خدمت سے رابطہ کریں

Dacă engleza nu este prima ta limbă și ai nevoie de ajutor, te rugăm să contactezi Serviciul de interpretare și traducere

ইংরাজী যদি আপনার প্রথম ভাষা না হয় এবং আপনার সাহায্যের প্রয়োজন হয় তবে অনুগ্রহ করে দোভাষী এবং অনুবাদ পরিষেবাটিতে যোগাযোগ করুন

إذا لم تكن الإنجليزية هي لغتك الأولى وتحتاج إلى مساعدة ، فيرجى الاتصال بخدمة الترجمة الشفوية والتحريرية

☎ : 0161 627 8770

@ : interpretation@pat.nhs.uk

To improve our care environment for Patients, Visitors and Staff, **Northern Care Alliance NHS Group** is Smoke Free including buildings, grounds & car parks.

For advice on stopping smoking contact the Specialist Stop Smoking Service on 01706 517 522

**For general enquiries please contact the Patient Advice and Liaison Service (PALS) on 0161 604 5897**

**For enquiries regarding clinic appointments, clinical care and treatment please contact 0161 624 0420 and the Switchboard Operator will put you through to the correct department / service**

The Northern Care Alliance NHS Group (NCA) is one of the largest NHS organisations in the country, employing 17,000 staff and providing a range of hospital and community healthcare services to around 1 million people across Salford, Oldham, Bury, Rochdale and surrounding areas. Our Care Organisations are responsible for providing our services, delivering safe, high quality and reliable care to the local communities they serve.

The NCA brings together Salford Royal NHS Foundation Trust and the hospitals and community services of The Royal Oldham Hospital, Fairfield General Hospital in Bury, and Rochdale Infirmary (currently part of The Pennine Acute Hospitals NHS Trust).



[www.facebook.com/NorthernCareAllianceNHSGroup](http://www.facebook.com/NorthernCareAllianceNHSGroup)



[www.linkedin.com/company/northern-care-alliance-nhs-group](http://www.linkedin.com/company/northern-care-alliance-nhs-group)



Northern Care Alliance NHS Group (NCA) @NCAlliance\_NHS

**Date of publication: April 2014**

**Date of review: December 2020**

**Date of next review: December 2022**

**Ref: PI(DS)842**

© The Northern Care Alliance NHS Group

[www.pat.nhs.uk](http://www.pat.nhs.uk)

[www.northerncarealliance.nhs.uk](http://www.northerncarealliance.nhs.uk)

