

Having a testicular (varicocele) embolisation

This information sheet has been given to you to help answer some of the questions you may have about having a testicular (varicocele) embolisation. If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is a varicocele?

Normally, blood flows to the testicles through an artery and flows out via a network of tiny veins that drain into a long vein that goes up through the abdomen. The direction of blood flow in this vein should always be up, towards the heart. 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. The reverse flow of blood stretches and enlarges the tiny veins around the testicle to cause a varicocele, a tangled network of blood vessels, or varicose veins.

Varicoceles are a relatively common condition that tends to occur in men (affecting approximately 10-15% of men). Sometimes varicoceles cause no symptoms and are harmless. Occasionally, varicoceles can cause discomfort in the scrotum or aching pain.

What is testicular embolisation?

This is a procedure to treat varicoceles. Under x-ray guidance, the vein draining your testicle is blocked. 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.

What are the benefits of testicular embolisation?

- It is a minimally invasive procedure that does not need a surgical incision in the scrotal area.
- It is as effective as surgery when measured by improvement in pain and semen analysis.
- A patient with varicoceles on both sides can have both fixed at the same time through one vein puncture site (surgery needs two separate open incisions).
- General anaesthesia is not used for embolisation, whereas most surgery is done under general anaesthetic with greater associated risks.
- There is a lower rate of complications compared to surgery. Infection has not been reported after embolisation.
- It can be carried out as a day procedure, so you do not have to stay in hospital overnight, and the recovery time is shorter.

What are the risks of testicular embolisation?

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.
- 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.
- Renal vein thrombosis (blood clot in the vein that comes out of the kidney). This may lead to a reduction in drainage of the kidney, and requires surgery to treat it. This is a very rare complication.

Are there any alternatives?

You can have surgery to treat your varicocele. Your doctor has recommended testicular embolisation as the best option for you but if you would like more information on surgery, please speak to your doctor.

What do I need to do to prepare for the procedure?

To prepare for either 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 **020 7188 5573** (for Guy's Hospital) or **020 7188 5477** (for St Thomas' Hospital).
- 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 anyone (except water) for six 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 by private transport. We do not recommend that you use public transport, as it is unsafe if you feel unwell.

Giving my consent (permission)

The staff caring for you will ask your permission to perform the procedure. You will be asked to sign a consent form that says you have agreed to the procedure and that you understand the benefits, risks and alternatives. If there is anything you don't understand or you need more time to think about it, please tell the staff caring for you.

Remember, it is your decision. You can change your mind at any time, even if you have signed the consent form. Let staff know immediately if you change your mind. Your wishes will be respected at all times. If you would like to read our consent policy, please tell a member of staff.

How is embolisation performed?

In the IR theatre, you will lie on a special x-ray table on your back and be covered with sterile drapes. Your groin area will be cleaned with an antiseptic solution. The interventional radiologist will talk with you about which site he or she plans to use (where they plan to make the incision) when you sign the consent form.

Local anaesthetic will be injected to numb the area and stop you feeling pain. When the groin is numb, a thin tube (catheter) is positioned into the vein using x-ray guidance. Contrast (dye) is injected into the catheter and viewed on an x-ray television monitor. 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.

Will I feel any pain?

Most patients will have “conscious sedation”. This involves us giving you medicines through the cannula in your hand to relax you and ease your pain. This often causes you to forget most of the procedure afterwards; however you will be awake enough during the procedure to breathe for yourself and communicate with the staff.

Please tell the nurse if you have any pain during the procedure, so that you can be given more pain relief.

What happens after the embolisation?

You will be taken to the recovery room. You will need to stay in bed for about an hour. It is important that you stay still, so that the puncture site does not bleed.

A nurse will check your blood pressure, pulse and the catheter site regularly. Your nurse will tell you when you can start to move around, sit out of bed and leave hospital (with your escort).

What do I need to look out for after I go home?

Typically, patients are observed for a few hours 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 stay with you overnight.
- 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 IR department Monday- Friday 9am- 5pm, your GP, NHS Direct (which gives health information and advice from a specially trained nurse over the phone 24, contact details given below) or go to your nearest A&E department.

Appointments at King's

We have teamed up with King's College Hospital in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at King's. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

Contact us

If you have any questions or concerns about having a testicular embolism, please contact the Interventional Radiology department at

Guy's Hospital on 020 7188 5525
St Thomas' Hospital on 020 7188 5477

Monday to Friday, 9am to 5pm.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Language support services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

NHS Direct

Offers health information and advice from specially trained nurses over the phone 24 hours a day.

t: 0845 4647 **w:** www.nhsdirect.nhs.uk

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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