



Having a testicular (varicocele) embolisation

What is a varicocele?

Blood flows into the testicles through an artery and flows out via a network of tiny veins. The direction of the 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 to cause a varicocele, a tangled network of blood vessels, or varicose veins.

This is a common condition affecting 10 - 15% of men. Sometimes the varicocele cause no symptoms, but they may be associated with pain and / or reduction in sperm count.

What is testicular embolisation?

This is a procedure to treat varicoceles. Under x-ray guidance, the vein draining your testicle is blocked using small metal coils. This procedure is done as a day case by the Radiology Department. You will come to the hospital, have your procedure and return home a few hours later.

What are the benefits of testicular embolisation?

- Minimally invasive procedure that does not require a surgical incision
- 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 requires 2 separate open incisions)
- General anaesthesia is not required for embolisation, whereas would be required for surgery with greater associated risks
- 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
- Improvement in the pain and discomfort associated with varicocele
- May improve subfertility.

What are the complications of testicular embolisation?

- Some swelling may occur around the testicle shortly after the treatment and may persist for a few days
- There may be some bleeding and bruising around or from the insertion site in your neck or groin (1 in 200 patients)
- Infection at the site (1 in 1000 patients)
- Reaction to the 'contrast media' (special dye used to highlight the veins), very rare (1 in 40000 patients)
- There is a 5 - 10% chance the problem could reoccur requiring a repeat procedure, or you may be advised to have an operation
- In some patients the veins are connected in such a way that it is not possible to get the coils to the correct position and so embolisation is not possible. If this is the case, an operation will be needed to treat the varicocele.

Are there alternatives?

Varicoceles can be treated by conventional surgery, but embolisation is now the preferred technique as it is less invasive and results are just as good.

What do I need to do to prepare?

- **If you are taking any antiplatelet medications (for example clopidogrel) or any medicines that thin the blood (for example warfarin) or any NOACs please contact the department in advance. However, this does not apply to Aspirin, please continue this as normal**
- Food, milk or fizzy drinks may be consumed up to six hours before procedure
- Clear fluids, including tea and coffee (without milk), water or diluted juice, may be consumed up to two hours prior to procedure.
- Prescribed medications, especially pre-medication can be taken within 2 hours prior to procedure with a small drink of water <30ml).
- Chewing gum is permitted up to two hours prior to procedure
- If you are an insulin diabetic, do not have your insulin in the morning, please bring it with you.
- Please arrange for a friend or relative to bring and collect you after your procedure. It is essential to have a responsible adult with you for 24 hours following the procedure. If this is a problem you may require an overnight stay in hospital, please contact your consultant's secretary if this is the case
- If you have any allergies to medicines or contrast media please let the x-ray department know in advance.

What happens on the day of my appointment?

- You will be asked to attend the Medical Day Case Unit in the Ulster Hospital at 8.00am
- You will be cared for by a member of the nursing team who will prepare you by taking some blood tests, place a plastic tube in your arm (cannula), asking some general information and giving you a gown to wear for the procedure
- The Radiologist performing the procedure will discuss the procedure with you in detail and ask you to sign a consent form
- You will then be taken into the specialist x-ray room, known as Fluoroscopy, where you will be asked to lie on the x-ray table. The groin will be cleaned with antiseptic solution and you will then be covered with towels to keep the area clean. Your blood pressure and pulse will be recorded throughout the procedure
- A small injection of local anaesthetic will be given in the chosen area; this will sting first then go numb. A small tube is passed into the vein via a very small needle and wire. You may feel some pushing but it should not be painful
- Once the tube is in position an injection of contrast will be given to highlight the veins in the testes. The images will identify the area and once located the radiologist will pass the coils through the tube to block the vein
- The procedure usually takes 45 - 60 minutes.

Will I feel any pain?

The procedure is not usually painful as the local anaesthetic works very quickly to numb the area where the tube is placed.

What happens after the procedure?

Once happy with the procedure, the tube will be removed from the area. Pressure will then be applied to the area for a few minutes to prevent any bleeding and minimise bruising.

You will be recovered in Medical Day Case Unit by nursing staff. You will need to lie flat for 1 hour, then 2 hours additional bed rest. It is important to restrict movement to prevent bleeding at the puncture site. The nurse will check your blood pressure, pulse and puncture site regularly.

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

- You will need to rest for the remainder of the day. You can resume normal activities but should avoid lifting and strenuous exercise for 48 hours
- You will need a responsible adult to stay with you overnight
- Continue with normal medication as prescribed, but if you take metformin / Glucophage tablets let the staff know when you arrive as you will require special instructions after the procedure
- If you notice any bleeding you should lie down and press firmly on the area. If it persists speak to your GP or come to the Emergency Department
- You may also be required to refrain from sexual intercourse for a few days as you may experience some discomfort of the testes and groin area.

Contact details

The Radiology Department
Ulster Hospital
Upper Newtownards Road
Dundonald
BT16 1RH
(028) 9055 0476

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