United Lincolnshire Hospitals NHS Trust

Varicocele embolisation

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OUTSTANDING CARE personally DELIVERED

This leaflet tells you about having varicocele embolisation. It explains what is involved and what the possible risks are. It is not meant to replace discussions between you and your doctor, but can act as a starting point. If you have any questions about the procedure please ask the doctor who has referred you or the Interventional Radiology department.

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 typically using a spring (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-rays and a dye (contrast agent), which usually contains iodine. The dye is injected in to a blood vessel to make the varicoceles visible on X-ray. A small plastic tube (catheter) can then be positioned in the varicocele and embolisation can be performed.

Who has made the decision?

The consultant in charge of your care, normally a surgeon or infertility expert will have decided that this is the best option. However, you will also have the opportunity for your opinion to be considered and if, after discussion, you no longer want the procedure, you can decide against it.

Are there any risks?

Varicocele embolisation is a very safe procedure, but as with any medical procedure there are some risks and complications that can arise.

A small infection can occur at the needle site which can usually be treated with antibiotics.

A small bruise (haematoma) at the needle site can occur, but this is quite normal. The bruise might be sore for a few days but will disappear in a few weeks. Less commonly, ongoing bleeding in this area can lead to a short inpatient stay.

A few patients may experience mild discomfort in the loin or scrotum afterwards which rarely lasts more than a few days.

There is a very small risk of a coil, used to block the vein, could migrate to your lungs. If this happens and it cannot be retrieved it is very unlikely to cause any problems other than a cough and mild chest pain for a few days.

Rarely, it may not be possible to obtain a satisfactory position for embolisation, in which case your doctor will discuss your options with you.

Unfortunately, there is a possibility that the varicocele may come back. This can also happen after surgical treatment. If this happens, then your options can be discussed with your doctor.

The dye (contrast agent) used during the procedure is very safe, but occasionally can cause damage to the kidneys. This occurs mainly in patients whose kidney function is poor already and this will be identified on the blood tests that are performed before the procedure. Allergic reactions to the dye or other medications are also possible, but are very rarely serious.

During the procedure you will receive a dose of radiation as a result of the X-rays used. There is a possible risk of cancer induction from exposure to X-rays. However, we are constantly exposed to radiation from the air we breathe, the food we eat, the ground and from space. This is known as background radiation and has a cancer risk of around 1 in 10,000 per year. Having the procedure could result in you receiving an additional dose of radiation equivalent to a few years of background radiation. The associated risk of possible cancer induction from receiving a dose of radiation equivalent to a few years of background radiation is considered to be low. Your doctor has agreed that this procedure is the best examination for you compared with others and that the benefit of having it outweighs the risks from radiation.

If you need a magnetic resonance (MRI) scan in the future, you should tell the person doing the scan that you have had an embolisation.

Are you required to make any special preparations?

A varicocele embolisation is usually carried out as a day case procedure under local anaesthetic. You will be asked to attend the ward early in the morning so all required paperwork can be completed. You will also be asked not to eat for four hours before

the procedure, although you may take small sips of water up to an hour prior to the procedure.

You may be sent a blood form and asked to arrange a blood test prior to the procedure to check your bloods are within safe limits to have the procedure.

If you are taking anti coagulation or anti platelet medication, such as warfarin, you will be given instructions detailing if this medication needs to be stopped and for how long. If you have not been given this information please contact the Interventional Radiology department.

If you have previously had a reaction to the dye (contrast agent) or a local anaesthesia please contact the Interventional Radiology department.

If you are a diabetic you may be given instructions detailing if the medication you take needs to be stopped/altered following the procedure and if you require additional blood tests.

You should have someone to drive you home following the procedure. Someone should be at home with you for 24 hours following the procedure. If you do not please let the Interventional Radiology department know.

Who will you see?

A specially trained team led by an interventional radiologist who has special expertise in reading the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

Where will the procedure take place?

In the Interventional suite, which is located within the X-ray department and is similar to an operating theatre.

What happens during embolisation?

Before the procedure, a member of the interventional team will explain the procedure and ask you to sign a consent form. Please feel free to ask any questions that you may have and remember that even at this stage, you can decide against going ahead with the procedure if you so wish.

On the ward you will be asked to get undressed and put on a hospital gown. A small cannula (thin tube) may be placed into a vein in your arm in case you need any medication.

You will be asked to lie flat on your back on the X-ray table. The X-ray machine will be positioned above you. You may have monitoring devices attached to your arm, chest and finger.

The procedure is performed under sterile conditions and the team performing the procedure will wear sterile gowns and gloves.

The skin near the needle site, usually the groin but occasionally the neck, will be cleaned with antiseptic and you will be covered with sterile drapes. The skin and deeper tissues will be numbed with local anaesthetic. A small incision will be made, a needle, a wire and finally a catheter (fine plastic tube) will be inserted into the vein and guided, using the X-ray equipment, into position (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, these will remain in the 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 the interventional radiologist is satisfied with the images, the catheter will be removed. Firm pressure will be applied to the skin entry point, for about ten minutes, to prevent any bleeding.

Will it hurt?

It may sting a little when the local anaesthetic is injected. 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 although some patients do experience mild discomfort in the loin or scrotum afterwards which rarely lasts more than a few days.

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 your ward. Nursing staff will carry out routine observations. You will generally be required to stay in bed, initially lying flat. If you have an issue lying flat please contact the Interventional Radiology department**.** After which you will be allowed to sit up, then to walk around the ward, until you have recovered and are

ready to go home, usually 4 to 6 hours post procedure. You will be informed following the procedure when dressings should be removed and when normal daily activities should recommence.

If you have any concerns after discharge; for non-urgent issues please contact your GP or 111, for urgent issues please come to A&E.

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 you are satisfied that you have received enough information about the procedure.

Interventional Radiology

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United Lincolnshire Hospitals NHS Trust has worked with AccessAble to create detailed Access Guides to facilities, wards and departments at our sites.
www.accessable.co.uk/united-lincolnshire-hospitals-nhs-trust

References

If you require a full list of references for this leaflet please email patient.information@ulh.nhs.uk

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If you require this information in another language, large print, audio (CD or tape) or braille, please email the Patient Information team at patient.information@ulh.nhs.uk