Information for patients

Endovenous Laser Therapy

Northern General Hospital
You have been given this leaflet because you will be having Endovenous Laser Therapy (EVLT). This leaflet explains more about Endovenous Laser Therapy and answers some of the most frequently asked questions. If, after reading this leaflet, you have any questions or concerns, you should write them down and discuss them at your next appointment.

Where will my hospital appointments take place?

Your appointments will be at the Sheffield Vascular Institute and the Bev Stokes Day Surgery Unit at the Northern General Hospital.

The Sheffield Vascular Institute is one of the largest vascular centres in Europe. We specialise in the treatment of all circulatory conditions affecting the arteries, veins and lymphatics. If you wish to find out more about the Sheffield Vascular Institute then look under the Guide to Services of the Sheffield Teaching Hospitals NHS Foundation Trust website (http://www.sth.nhs.uk)

What is EVLT?

Endovenous Laser Therapy (EVLT) is a new technique for the treatment of varicose veins. It treats the vein directly without the need to remove, using a laser fibre inserted directly into the vein(s).

When was it first done?

The technique has been available in Sheffield since 2004.
Why do I need this operation?
You and your surgeon have agreed that laser treatment of your varicose veins is the best option for you.

Alternative options include: no treatment, compression stockings, surgery or injections into the varicose veins (sclerotherapy).

Will I need any tests first?
Yes, we will need to do a scan of the veins in your leg. This is a painless test known as a Duplex scan. The scan can either be performed at your outpatients appointment or in the Medical Physics department.

Am I suitable for this procedure?
Any patient with varicose veins due to reflux (backward flow of blood) in the long saphenous vein in the thigh, or its major branches, is likely to be suitable. This amounts to 70-80% of patients with varicose veins.

Not all patients with varicose veins are suitable. The procedure is not recommended for people who are unable to walk; in poor general health; have a clotting-disorder or are pregnant. Pre-procedure ultrasound scanning might reveal that your varicose veins are not suitable for EVLT. Most often this is because the vein is excessively twisting or superficial thrombophlebitis (inflammation of the vein) is found.
How long will I need to be in hospital?

You will be in hospital for half a day. The procedure takes approximately half to one hour per leg, depending upon the complexity and severity of your veins.

There is no need to fast before your procedure as local anaesthetic is used.

You will be admitted by the nursing staff who will ensure that you have someone to take you home. A theatre checklist is completed and you will change into a theatre gown. You will be measured for a compression stocking. The surgeon will discuss the procedure with you and you will need to sign your consent form.

We must seek your consent for any procedure beforehand. Staff will explain the risks, benefits and alternatives where relevant before they ask you to sign your consent. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.

What do I need to bring with me?

Please bring with you a dressing gown (to wear over your theatre gown) and a pair of slippers. You may also wish to bring a book or magazine to read while you are waiting.

How is it done?

A laser fibre is inserted into the vein and the vein is destroyed by laser energy heating the inside of the vein. The procedure is performed through a tiny cut at the knee level, usually only 1-2mm long. The procedure is performed with local anaesthetic.
Several injections in the leg are necessary. These are uncomfortable, but the discomfort does not last for long.

Some patients have the smaller veins in the leg removed through tiny cuts (avulsions). These cuts are usually closed with adhesive strips. These are performed after the laser part of your treatment has taken place. Not all patients require this part of the operation but your surgeon will have discussed this with you.

**What happens after the procedure?**

**Laser alone**
If you had laser treatment alone, the surgeon will apply a compression stocking to your leg at the end of the procedure. You will need to wear the stocking for 7 days, but you may wear it for longer. There will also be some long foam compression pads inside the stocking, which give extra compression to the vein treated. These can be removed after 2 days.

**Laser and avulsions**
If you have had laser treatment and avulsions your surgeon will apply a compression bandage to the leg. You will need to make an appointment with the practice nurse at your GP’s surgery to have this removed. You will have been measured and given a compression stocking by the day surgery staff and this needs to be applied with assistance by the practice nurse. You will need to wear this for a further 7-10 days or it may be worn for longer if it feels more comfortable to do so.

Following the procedure you will be given a drink and a light snack. You will be asked to take a 20 minute walk
within the hospital. After this you will be checked by one of our team and allowed home.

**Are there any risks with this procedure?**

Common side effects are bruising and aching or pain in the length of the vein treated. In most cases the pain experienced resolves after a few days but in some patients it can persist for up to 2 weeks.

Rare side effects are skin discolouration or thermal injury to neighbouring tissues that might cause skin erythema (reddening) or neuropraxia (‘pins and needles’ sensation) in the leg, which recovers over time.

There is a possible risk of infection of the leg or deep vein thrombosis (DVT) - or clot formation in the major veins of the leg. The actual incidence of these problems is extremely rare.

As with all procedures there is a risk that the treatment will not be a success, although this is rare.

**How long before I can resume normal activities?**

You should resume normal activity as soon as possible. This is normally within one or two days. Hot baths and vigorous activity such as gym workouts should be avoided in the first week. You will be given a short course of painkillers to reduce any discomfort following treatment. Pain and discomfort for most patients are minimal and usually improve within a few days, but can last for longer. Flying and excessively long journeys should be avoided for
the first four weeks due to a slightly increased risk of deep vein thrombosis (DVT).

What are the advantages?

• No general anaesthesia is required.
• No cut is required at the groin.
• The procedure is less painful than surgery.
• Time to return to normal activity is much quicker than surgery, typically 1-2 days.

Will I need to come back to hospital for a check up?

A follow-up appointment 6 weeks after your treatment will be made for you. At this follow-up, the success of the treatment will be checked and we will discuss with you whether any additional treatment might be useful.

Some patients treated with EVLT will require further treatment for their varicose veins in the form of injection sclerotherapy. This is also an outpatient procedure. Your specialist will explain this to you in more detail when you attend the clinic.

What are the long term results?

The early results of this treatment are extremely good. Up to two years of follow-up has shown over nine out of ten patients treated have a good result and would recommend it to others. As the procedure is new, the longer-term results are not known. There are no indications so far, that EVLT is inferior to traditional varicose vein surgery.
If you require any further information, contact:

Bev Stokes Day Surgery Unit  
(Monday to Friday, 8am - 6pm)

Tel: 0114 226 6020

Vascular Secretary  
Tel: 2269412

Vascular Nurse Specialist  
Tel: 2269311 / 2714688