Endovenous laser therapy for varicose veins (EVLT): Patient Information

You have varicose veins which can be treated using Endovenous Laser Therapy or ‘EVLT’. This information sheet tells you about the procedure. Please read it carefully and ask your surgeon if you have any further questions or concerns.

What is EVLT?
EVLT is a relatively new, minimally invasive treatment for varicose veins. It has been approved by the National Institute for Clinical Excellence (NICE), which assesses the safety and effectiveness of all new treatments. The size and shape of the varicose veins will determine whether we are able to treat you using EVLT. EVLT is performed under a local anaesthetic, and only requires a small wound to be made at around the level of the knee. A laser is used to obliterate (seal) the faulty vein, and you will usually be able to go home on the day of treatment.

What will happen during the treatment?
An ultrasound scan will be used to mark the veins that require treatment. An injection will freeze the skin and a small flexible wire will be passed up inside the vein. The laser fibre is threaded over the wire. The position of the laser will be checked and further local anaesthetic will be injected around the vein again guided by ultrasound. The laser uses powerful heat energy to seal the vein up from the inside in just a few minutes. You should not feel anything during the treatment. Once the vein has been sealed, the probe is removed. At this point any varicose veins that have been marked by the surgeon prior to the procedure may be removed through small incisions (phlebectomies) in order to achieve the best cosmetic result. These small incisions are closed with glue or steristrips which can be removed at 5 days. Finally a bandage applied to the leg. This bandage should be kept on for 1-3 days, and then a support stocking should be worn for a further 2-3 weeks.

What will happen after the treatment?
After EVLT you will be able to walk almost immediately and then go home. You should not drive, and if you are travelling for more than an hour from the hospital you should sit on the back seat with your leg(s) up. Stop every hour and walk around for 5 minutes. You will be given a supply of painkillers to take home, although most patients do not require anything stronger than paracetamol. Normal activity, including work, can be resumed as soon as you like, although contact sports, heavy exercise and swimming should be avoided for 1-2 weeks. When the bandage is taken off, you may see some bruising or hardness under the skin. This is quite normal and will gradually settle. You should wear the stocking during the day for up to 3 weeks, but may remove it at bedtime or for bathing. A follow-up appointment will be
organised to see you and scan your veins 6 weeks after your treatment, by which time most of the bruising and hardness will have settled.

**What advantage does EVLT have over conventional surgery?**
EVLT can be performed under a local anaesthetic, and can usually be done as a daycase procedure. Normal activity can be resumed straight away, and you should be able to return to work within a few days. EVLT causes less bruising and requires fewer skin incisions than conventional surgery so there is a lower risk of potential for complications such as wound infection. We do not know how laser treatment compares with conventional treatment in the long term, although results over the last 3 years appear to be as good as or even better than surgery. However EVLT appears to cause more pain than VNUS closure.

**What are the potential complications?**
There is a chance the vein may not be obliterated by the laser (this occurs in about 3% of patients). Some patients have bruising or tenderness that lasts for longer than 3 days, this bruising is more common if you have had varicose veins removed at the same time as the EVLT procedure. It is not uncommon for some discomfort to develop around the obliterated vein between 5 and 10 days after the procedure due to inflammation. If this occurs you may require some anti-inflammatory tablets such as ibuprofen. About 1-5% of patients experience some numbness in the leg after EVLT, but this is almost always temporary. Because the laser generates high temperatures there is a very small risk of skin burns. As with any surgical procedure there is a small risk of blood clots forming in the main leg veins (DVT) although this is less common after VNUS than conventional surgery.

**Airline Travel**
Although the risk of blood clots is minimal with these keyhole techniques we do not advise patients to undertake air travel within 4 weeks of the procedure.

*The practice of medicine and surgery is not an exact science and reputable practitioners cannot properly guarantee results either expressed or implied. These procedures are highly advanced and discussion about them (including risks and benefits) should be with your specialist.*