

Endovenous Laser Ablation (EVLA)

Patient Information and Informed Consent Form

EVLA is a recent innovation in modern varicose vein treatment. EVLA delivers precise laser energy to the treated vein to seal them off. EVLA is an alternative to surgical stripping of varicose veins. It is less invasive and associated with minimal downtime and complications. It is often used in conjunction with ultrasound-guided sclerotherapy (UGS). EVLA is best for very large stem-veins whereas UGS is best for the smaller branch-veins. Treating incompetent veins will limit and reverse varicose vein complications such as leg swelling, itch, pain, skin darkening (pigmentation), eczema, hardening of the skin (lipodermatosclerosis) and end-ulceration. EVLA involves a combination of laser and ultrasound technology and does not require admission to hospital or general anaesthesia.

What should you do before EVLA?

Do not schedule a long distance trip (more than 5 hours) within 4 weeks of this treatment.

Oral Contraceptive Pill or Hormone Replacement Therapy (HRT) may need to be stopped before the treatment (discretionary).

You may receive light sedation during the procedure. It is recommended that you not drive or operate machinery for the rest of the day, so consider taking the day off work.

What happens during EVLA?

The procedure is performed under oral and/or nitrous oxide sedation. Ultrasound is used to locate the abnormal vein. Next, the laser fibre is inserted into the target vein. Local anaesthetic is infiltrated around the vein at several points using extremely fine needles, under ultrasound guidance. The laser is precisely positioned before it is activated and slowly withdrawn. The laser activation delivers heat that is capable of sealing the entire length of the vein.

After EVLA, ultrasound guided sclerotherapy (UGS) is started on some of the branch-veins. UGS is continued in the subsequent weeks until all the incompetent veins are fully treated. Compression stockings and bandages are applied after laser treatment session.

What should I do after EVLA?

You need to go for a 30 min walk immediately after treatment, and 30 mins daily for the next 3 weeks. Maintain normal daytime activities and avoid standing for long periods. Avoid strenuous physical activities for the following 3 weeks to allow the treated leg to properly heal.

Avoid any flights greater than 5 hours duration for 4 weeks after treatment. Bandages should be left on for 24 hours. The next day, you can take the bandages and stockings off and have a shower. You need to wear the stocking during the day for the next 3 weeks.

The treated leg is checked with an ultrasound scan within the week to check on the treated vein and to exclude the very small risk of blood clotting (DVT). Residual branch-veins will require further UGS at a subsequent appointment.

What can you expect following EVLA?

The following features are expected and do not need to be reported:

Bruising down the length of the treated vein is almost invariable and should not be cause for concern.

Mild to moderate pain may occur in the first few days. Aching in the leg may persist for up to two weeks. Pain is usually improved by walking or by taking Panadol. Soreness behind the knee can be related to friction from stockings.

Discolouration is common and not a cause for concern. Red, raised areas can develop over the treated veins but these usually disappear within 2–3 weeks.

Tender lumps due to blood trapped in the treated vein are common and can occur within the first 1–2 months. Trapped blood settles with time but can also be released at subsequent visits.

What are the possible complications from EVLA?

Adverse reactions for EVLA do not differ much from those for UGS (see UGS patient information and informed consent). All lasers can cause burns but this is very rare when the overlying skin is protected with tumescent anaesthetic. Appropriate laser eyewear is used to protect the eyes against laser injury.