

# Cyanoacrylate (VenaBlock) Glue Injections

## Patient Information Sheet & Informed Consent Form

**Cyanoacrylate (Venablock) Glue** is a recent innovation in modern varicose vein treatment. The medical grade adhesive glue is delivered to the varicose veins via direct needle injections or a soft catheter. VenaBlock Glue 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 foam sclerotherapy (UGFS). VenaBlock Glue is best for very large stem-veins whereas UGS is best for the smaller branch-veins. Treating incompetent veins may limit and reverse varicose vein complications such as leg swelling, itch, pain, skin darkening (pigmentation), eczema, hardening of the skin (lipodermatosclerosis) and end-ulceration. VenaBlock Glue involves a combination of adhesive glue to seal larger veins (near the groin) under ultrasound technology and does not require admission to hospital or general anaesthesia.

### What should you do before Cyanoacrylate (Venablock) Glue?

Do not to schedule a long distance trip (more than 5 hours) more than one week before the procedure and less than 2 weeks after the procedure.

It is usually not necessary to stop your Oral Contraceptive Pill or Hormone Replacement Therapy (HRT) for the procedure. This will be at the discretion of the doctor.

### What happens during Cyanoacrylate (Venablock) Glue?

Please wear comfortable clothing and the treatment will require exposure of the legs (underwear to be kept on). Your treated leg(s) will be cleaned with a special skin antiseptic. Ultrasound is used to locate the abnormal vein and the VenaBlock Glue is placed within the most dilated bit of the varicose vein (either near the groin or upper calf) either by direct needle injection or via soft catheter. Immediately after the glue is delivered into the vein, firm compression (hand pressure by the sonographer) is applied over the site of VenaBlock Glue for up to 1 minute to ensure adhesive closure of the vein. The firm compression may be slightly uncomfortable and there will be a moderate 'hot' sensation lasting 1–2 minutes when the VenaBlock Glue comes into contact with the inner lining of the vein. Effective closure of the varicose vein may require 3–4 point injections of VenaBlock Glue in the affected vein.

When the VenaBlock Glue injections are completed, the doctor will perform additional Ultrasound Guided Foam Sclerotherapy (UGFS) on the remaining network of incompetent (abnormal) veins. If you have an extensive network of incompetent (abnormal) veins, additional UGFS may need to be undertaken the following week to complete the treatment. Compression stockings will be applied to the treated leg after the procedure.

### What is the difference between Endovenous Laser Ablation (EVLA) and Venablock Glue?

Unlike Endovenous Laser Ablation (EVLA), VenaBlock Glue does not use heat to destroy the vein, instead it uses a glue injected through a needle or soft hollow catheter to stick the vein walls together, and close it down. Because no heat is involved it doesn't require the injection of local anaesthetic along the length of the vein being treated, and there is no risk of heat injuring the nerves in the lower calf.

## What happens after the procedure?

Immediately after the procedure, go for a 30 min walk. You should not drive for the first 2 hours after the procedure and if you are travelling for > 1 hour to get home, stop every hour and walk around for 5 minutes. Most patients do not require anything stronger than paracetamol for the next 24 hours.

Maintain normal daytime activities and avoid standing for long periods. Avoid excessively strenuous physical activities for the following 2 weeks to allow the treated leg to recover. It is recommended that you walk 30 mins every day for the next 3 weeks.

Avoid any flights greater than 5 hours duration for 2 weeks after treatment. The compression stocking should be left on overnight. The next morning, you can take the stockings off and have a shower and thereafter, you may remove the stocking for short showers and when you are in bed at night. 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 Venablock Glue?

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

- Bruising at any point down the length of the treated vein is common and should not be cause for concern.
- Mild to moderate discomfort may occur in the first few days. Mild aching in the treated leg may persist for several weeks. Discomfort is usually improved by walking or by taking Panadol. Soreness behind the knee can be related to friction from stockings. Numbness of the foot can occur on the first night because of the new (tightly fitted) stocking – simply remove the stocking should this occur.
- 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 potential complications?

Cyanoacrylate glue is still a relatively new treatment and the longer-term results of treatment are not yet known, although it appears to perform as well as the other modern keyhole options currently available (Endovenous Laser Ablation, Ambulatory Phlebectomy), and all these treatments are between 95% and 98% effective at closing the treated vein. There is a chance the vein may not be obliterated by the treatment. If the procedure is not effective then it can be tried again, or the veins can be treated by other modern alternative options such Endovenous Laser Ablation, Ambulatory Phlebectomy or Ultrasound Guided Foam Sclerotherapy.

Some patients have bruising or tenderness along the line of the treated veins that can last for a few weeks, and there can be inflammation (phlebitis) in some branches of the treated vein. This can leave a hard tender lump that may take a few months to settle, and on occasion there can be brown discolouration of the skin that takes some time to disappear. Rarely the glue may irritate the sensory nerve adjacent to the treated vein and cause prolonged pain or tingling sensation.

As with any surgical procedure there is a small risk of blood clots forming in the main leg veins (DVT) and this appears similar to other keyhole treatments. Allergic reactions to the VenaBlock Glue can occur but are extremely rare and will present with moderate to severe itching over the treated vein. Leakage of Glue outside of the treated vein into the surrounding tissue may cause pain and inflammation that can be persistent until treated with anti-inflammatory steroids (tablets and/or injections)