

Treating varicose veins with cyanoacrylate glues: Patient information

You have varicose veins which can be treated using cyanoacrylate glue occlusion. This information sheet tells you about the procedure. Please read it carefully and ask your surgeon if you have any further questions or concerns. This leaflet should be read in conjunction with NICE interventional procedure guidance 526 "Cyanoacrylate glue occlusion for varicose veins"

What is cyanoacrylate glue occlusion (Venaseal™)?

Cyanoacrylate glue occlusion is a minimally invasive treatment for varicose veins. It is different from the "endothermal" treatment methods recommended for patients with varicose veins by the National Institute for Health and Clinical Excellence (NICE), which assesses the safety and effectiveness of all new treatments. This treatment does not use heat to destroy the vein, instead it uses a medical grade superglue injected through a 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, there is no risk of heat injuring the nerves in the lower calf, and there is usually no requirement to wear a stocking after the treatment.

What will happen during the treatment?

An ultrasound scan will be done on your leg to identify the veins to be treated. An injection will freeze the skin and a small flexible wire will be passed into the vein. A fine tube is passed over this wire and then the treatment catheter is threaded through the tube. The position of the catheter will then be checked again by ultrasound.

Once the delivery catheter is advanced into position at the top of the vein in the groin the proximal vein is compressed and a measured dose of cyanoacrylate glue is delivered through the tip of the catheter to seal the vein. The catheter is withdrawn in stages and the steps repeated to close the vein using ultrasound imaging to monitor progress. You should not feel anything during the treatment. When the vein has been closed the catheter is removed and a support stocking is placed on the leg.

Sometimes in order to improve the results of your treatment the surgeon will also inject some of your veins with a foam solution designed to obliterate veins that cannot be treated with the Glue. These injections can leave a brownish discolouration in place of the vein, but this almost always disappears within 12 months. Alternatively the more prominent veins may be removed under local anaesthetic, through small incisions in the skin (phlebectomies). Your surgeon will discuss this treatment with you at the time of your treatment if it was not discussed with you at the out-patient clinic.

What will happen after the treatment?

After treatment you will be asked to walk around for 15 minutes, have a drink and then go home. You should not drive on the day of treatment. You will be offered 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.

Will I need to come back to the clinic?

We will usually arrange to see you and scan your veins 6 weeks after your treatment, by which time most of the bruising and hardness will have settled. If any small varicose veins remain, these can then be treated as an outpatient by injection.

What advantage does cyanoacrylate glue have over other keyhole vein treatments?

Because the glue treatment doesn't use heat to destroy the vein, there is no requirement to inject local anaesthetic along the length of the vein to be treated, and only a small injection of local anaesthetic is required at the site where the treatment catheter is inserted. By not using heat it means that injury to the nerve near the ankle, that can lead to numbness and tingling that can last for 12 months, or even permanently, doesn't occur. You are also unlikely to require to wear a stocking after treatment with glue.

What are the potential complications?

Cyanoacrylate glue is 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 keyhole treatments, with 93-98% of veins treated with glue remaining closed for at least a year after treatment.

There is a chance the vein may not be obliterated by the treatment. If the procedure is not effective then the veins can be treated by other keyhole methods. There may be a few visible varicose veins left after treatment, but these rarely cause symptoms and become less prominent with time. Most people do not require additional injection treatment for these residual veins.

Some patients have bruising or tenderness along the line of the treated veins that can last for a few weeks, and if the vein is close to the skin, bruising leading to a brown line is sometimes seen for a few months after treatment. There can be inflammation (phlebitis) in some branches of the treated vein that 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.

The commonest complication that can occur in up to 20% of cases is the development of a skin reaction over the treated vein which leads to slight reddening of the skin, which also feels warmer than the surrounding skin. This usually comes on around a week to 10 days after treatment and lasts a week or so before disappearing. It is thought to be an inflammatory reaction and if severe can be treated with antihistamines and anti-inflammatory medications.

As with any surgical procedure there is a small risk of blood clots forming in the main leg veins (DVT) and this might be slightly more common after cyanoacrylate glue than other keyhole treatments where the risk of this happening is around 1 in 100 cases. Allergic reactions to the chemical used during the treatment can occur but are extremely rare.

Airline travel

Although the risk of blood clots is minimal with these keyhole techniques we do not advise patients to undertake long haul air travel within 6 weeks of the procedure. Short flights may be acceptable, but if you have any doubts please contact your consultants secretary before attending for treatment.