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MODERN TREATMENT OPTIONS FOR VARICOSE VEINS.

These days there are several ways to treat troublesome varicose veins. The options include surgical treatment and non-surgical treatment. As a vascular surgeon who is trained in both of these treatment methods, I am able to offer you the most appropriate choice for your vascular veins.

SURGICAL TREATMENT

The surgical treatment involves an operation usually under general or regional anaesthetic to remove the varicose veins.

Once the major areas of valvular failure are identified with ultrasound and the varicose veins are marked for removal an incision is made in the groin or behind the knee depending on the site of the major valvular problem. The major junctions here are isolated and tied off at these sites and the main vein (great saphenous or small saphenous) is removed by a stripping operation. Short 3mm incisions are then used to remove the larger ropier varicose veins. The legs are then bandaged and the patient will be required to wear a class 2 graduated compression stocking for up to 4 weeks. The stocking is usually worn constantly for the first week and just during the daytime for the ensuing weeks.

The recovery from this surgery involves gentle walking initially and a programme of gradual increase in activity over a week is recommended. An overnight stay in hospital is all that is usually required and patients usually require approximately 1 week off work or any heavy activities to allow for early healing. Resumption of normal activities will usually require 7 – 10 days recovery time.

MODERN TECHNIQUES

Doctors treating varicose veins have for many years attempted to achieve good results in “out of hospital” setting. The main stay of treatment in this setting has been compression sclerotherapy. Recently further developments in these techniques have seen the use of foamed sclerosants that are improving the effectiveness of treatments in doctors consulting rooms.

This technique involves mixing a sclerosant (the active substance causing the veins to shut) with air through a 3 way tap to create a foam. This is then injected under ultrasound guidance into large veins causing the blood in those veins to be displaced and the active ingredient to have a more effective contact with the lining of the vein

wall then previously. Combined with good compression this technique is most effective when there is no major saphenous trunk reflux. It is a technique that can be used alone or in combination with another modern technique used to close the main saphenous trunk, that being endovenous laser ablation using the CoolTouch CTEV 1320 nm laser.

COOLTOUCH CTEV 1320 NM LASER ABLATION.

This treatment is performed in my consulting suite in a specially designated room for endovenous treatments. Initially after the main saphenous trunk is marked by ultrasound a local anaesthetic paste is placed along the length of the marked vein and covered with plastic and warm beanbags are applied which help to dilate the vein for access. If you are anxious you may wish to breath on an inhalational medicine called Pentrox that can help to calm you and make the entire experience more comfortable. This agent is very safe and is used in ambulances and emergency situations. It has been shown to be very safe in adults and children in the doses used.

After 30 minutes you are transferred to the laser room where your leg is washed with an antiseptic solution and draped to create sterile conditions.

Using the ultrasound probe the main saphenous trunk can be seen and accessed with a needle and wire. The laser fibre is then inserted into the vein under ultrasound guidance and positioned so that when it is turned on the saphenous trunk will be closed along the planned length.

Local anaesthetic is then injected into the thigh around the vein to anaesthetise the leg and also provide an area where heat can dissipate to avoid injury to the tissues surrounding the vein. This is called Tumescant anaesthesia. The laser is then activated and withdrawn along the saphenous trunk using an automatic device that has the effect of shutting the vein.

After removal of the laser probe the leg is bandaged and a class 2 compression stocking applied. The patient is then free to be discharged home with an adult companion.

The entire procedure takes approximately 45 minutes to 1 hour to complete. The stocking and bandage stay in place for 48 hours and then the bandages can be removed and the stocking replaced and worn day and night for the next week. You will then return for an ultrasound examination to make sure that the laser treatment has been effective and to monitor the progress of the healing veins.

The advantages of the CootTouch endovenous laser treatment as opposed to conventional surgery are

1. No scarring.
2. No cut in the groin.
3. Less bruising.
4. Faster recovery
5. Can be done under local anaesthetic.
6. No overnight hospital stay needed.

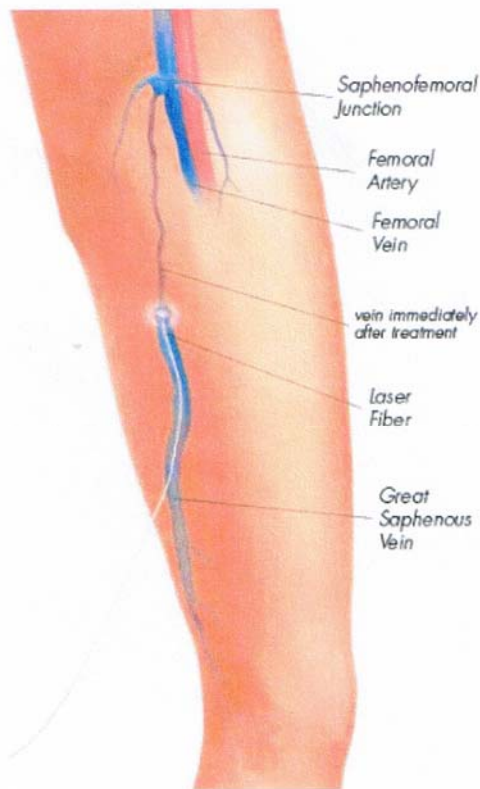


Figure 1. Diagrammatic representation of endoluminal laser treatment of the greater saphenous vein.

There are other laser treatments for varicose veins and these are effective as well. There appears to be a difference with the CoolTouch CTEV 1320 nm laser in that it causes less bruising. This appears to be because the laser energy is absorbed by the water of blood and there are fewer ruptures of the main saphenous trunk when using this technology. With other laser systems there may be a taste of charcoal in the mouth from boiling of the blood which is the target for different wavelengths of laser energy used in those situations. This does not occur with the Cool Touch system. With fewer micro perforations of the vein using the CoolTouch system there appears to be less bruising and less pain and faster recovery than other laser treatments.