# Information leaflet

Radiofrequency ablation (RFA) of Varicose Veins

This information sheet is to help answer some of the questions you may have about having RFA for your varicose veins. It explains the benefits, risks and alternatives of the procedure as well as what you can expect when you are admitted to the Duchy Hospital for your procedure.

What is radiofrequency ablation?

RFA (also known as the VNUS, ClosureFast and VeinCLEAR) uses a catheter to close off the faulty vein that is feeding your varicose veins.  The procedure is usually done under local anaesthetic, which is medication that ‘numbs’ a specific area of your body so it is pain free, but does not put you to sleep. You do not require a general anaesthetic or overnight stay for this procedure.

An area of skin of your leg is numbed with local anaesthetic before making a small (2mm) cut, usually near your knee or on your calf. A narrow tube called a catheter is put into the vein that is being treated. Ultrasound images are used to make sure it is in the right place. A fine probe is then passed through the catheter and inside your vein. Fluid containing local anaesthetic is then placed around the vein by a series of small injections along the vein. This numbs the vein and also protects surrounding structures in your leg from being damaged by the heat of the probe.

Once the anaesthetic is all in place the tiny catheter, which is powered by radio frequency (RF) energy, delivers heat to the vein wall. As heat is delivered, the vein wall shrinks and the vein is sealed closed. The catheter is slowly removed. An ultrasound scan checks that the procedure has been successful.

A dressing is placed over the small cut and a compression bandage is placed on the leg. The procedure usually takes around half an hour. Over the next few days the body reacts to the damaged vein by causing inflammation (swelling) and absorbing the tissue in the vein. This makes sure that the vein stays closed permanently.

What are the benefits – why should I have RFA?

Traditional surgery for varicose veins involves making a cut in your groin to remove the affected vein, this is known as stripping. It is done under general anaesthetic, which means you’re asleep for the entire procedure.

RFA avoids this cut in your groin and much of the bruising around the area where the vein is stripped. RFA is done under local anaesthetic, so you recover faster and avoid many of the risks involved with having a general anaesthetic.

What are the risks?

Most patients feel a tightening along their leg after the procedure. Once the local anaesthetic wears off there may be some pain and bruising along the line of the treated vein.

About one in 10 patients develop marked inflammation causing discomfort and lumpiness around the vein (this is called phlebitis). This usually settles down within a month.

Recurrence of varicose veins can occur both after surgical stripping and RFA. The underlying weakness in the vein valves may result in further varicose veins in the future. Overall the risk of recurrence after RFA is thought to be in the region of 20%.

Rarer problems are a small risk of damage to other veins and nerves, which may result in numb patches of skin. Burns to your skin are possible, but very rare.

Any operation that involves a cut to the skin has a risk of infection. As RFA involves a very small cut, this risk of infection is low.

Deep vein thrombosis (DVT) is a rare complication of any operation on the legs. To lower this risk you will be advised to return to walking normally after RFA. If you are deemed to be at high risk of DVT (for example if you have had a DVT in the past) you may be given a short course of heparin injections following your surgery.

How well does RFA work?

 The results of the procedure are generally very good. Studies have shown that the vein is sealed up in nearly everyone who has RFA (90-100 out of 100 people). Some studies have also shown that there is lesser degree of bruising and post procedure pain in RFA compared to surgical stripping.

Will losing the vein make the circulation in my legs worse?

No. The important veins in your leg that return blood to your heart are the deep veins, which are ot damaged by this treatment. The vein treated by RFA had reflux (blood going the wrong way). Some people’s circulation is better after treating the refluxing vein.

What happens after RFA and when I go home?

Your leg will be bandaged from the foot up to the top of the treated vein. You will be able to walk out of the hospital around half an hour after your procedure and after we have ensured that you are well and safe to be discharged. You should not drive home.

The leg is usually a little more uncomfortable the morning after the procedure, as the local anaesthetic has worn off and your leg will be slightly swollen. You will be given painkillers to take home with you. It is important to follow the instructions on the packet.

The bandage should stay on for 24 hours after the procedure. You should then remove the bandage and wear the fitted support stocking you will be given to take home. You may remove the stocking to have a bath or shower but continue to wear it at all other times for a week.

It is important not to be disappointed when you first remove the bandages. It is quite possible that your varicose veins are still there. The procedure deals with the cause of the varicose veins (the high pressure in the veins) rather than the veins themselves. The varicose veins therefore can take a few weeks to shrink back down following the treatment.

It is a natural reaction to limp when your leg is painful, but your muscles, bones and joints are not affected by RFA, so you need to walk as normally as possible. Walking keeps your blood flowing in the important deep veins, but being inactive can increase your risk of DVT. We recommend a minimum of three 20 minute walks each day after the procedure.

We advise that you do not drive at least 24 hours after RFA. You should only drive again when you are free of pain and able to perform an emergency stop comfortably.

You can usually return to work after 36 hours depending on your recovery and the type of work that you do. If you develop phlebitis (lumpy inflammation along your vein), you may require some additional time off.

Avoid strenuous exercise for a few days and then gradually build up the amount you do.

How soon can I fly?

Sitting down for long periods with your knees bent increases the risk of a DVT. You should avoid long haul travel (out of Europe) for at least four weeks after your procedure.

Will I have a follow-up appointment?

You will be followed up in Mr Hoppers’ clinic 8-10 weeks after your treatment. You will be able to discuss the results of your treatment at this time.

Of course, should you have any worries or concerns, then please do not hesitate to contact Mr Hopper sooner (via his PA Sue).