Radiofrequency ablation (RFA) for varicose veins

The aim of 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 come to hospital.

If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is RFA?
RFA, also known as the VNUS Closure procedure, uses a catheter to close off the vein that is feeding your varicose veins. (See our information sheet for more information on varicose veins)

What happens during the procedure?
The procedure is usually done under local anaesthetic, which is medication that ‘freezes’ a specific area of your body so it is pain free, but does not put you to sleep.

Your surgeon numbs your skin with the 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 needs treating. 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. Local anaesthetic is injected into the vein and the surgeon then activates the tiny catheter, which is powered by radio frequency (RF) energy, to deliver 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 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 less than five in 100 people.

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.

**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. However, because the RFA procedure is relatively new and has not been performed for as long as surgical stripping, there is limited long term information. The data currently available three years after the procedure has shown that the treated veins remained closed in all cases.

**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 not 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.

**Giving my consent (permission)**

We want to involve you in all decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This confirms that you agree to have the procedure and understand what it involves. You should receive the leaflet, Helping you decide: our consent policy, which gives you more information. If you do not, please ask us for one.

**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 checked your blood pressure and bandages. 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 48 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 further two weeks. You do not need to wear it when you go to sleep.

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 48 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 not feel like returning to work for about 10 days. If you need a sick note please contact your GP.

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 sent an appointment by post, usually six to eight weeks after your treatment, to check the results. You will be able to discuss the results of your treatment at this time.

**Appointments at King’s**

We have teamed up with King’s College Hospital in a partnership known as King’s Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at King’s. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

**Contact us**

If you have any questions or concerns about RFA, please contact the Vascular Nurse Specialist on 07917 599703 (Monday to Friday, 9am to 5pm).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

**Pharmacy Medicines Helpline**

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

e: 020 7188 8801 at St Thomas’  t: 020 7188 8803 at Guy’s  e: pals@gstt.nhs.uk

**Patient Advice and Liaison Service (PALS)**

To make comments or raise concerns about the Trust’s services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas’  t: 020 7188 8803 at Guy’s  e: pals@gstt.nhs.uk
Language Support Services
If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

**t:** 020 7188 8815  **fax:** 020 7188 5953

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

**w:** [www.nhs.uk](http://www.nhs.uk)

Become a member of your local hospitals, and help shape our future
Membership is free and it is completely up to you how much you get involved. To become a member of our Foundation Trust, you need to be 18 years of age or over, live in Lambeth, Southwark, Lewisham, Wandsworth or Westminster or have been a patient at either hospital in the last five years.

To join, please call 0848 143 4017, email members@gstt.nhs.uk or visit [www.guysandstthomas.nhs.uk](http://www.guysandstthomas.nhs.uk)