

## **RADIOFREQUENCY (RF) ENDOVENOUS TREATMENT OF TRUNCAL VARICOSE VEINS**

### **Frequently Asked Questions**

- **What are varicose veins?**

Varicose veins are veins that lie just below the surface of the skin which have become enlarged and tortuous. All veins have valves within them which are responsible for preventing blood from pooling in the leg. If valves fail to work, pressure increases in the veins and causes them to swell and bulge. Varicose veins are usually most noticeable in the calf and ankle. Standing for prolonged periods may cause the calf to ache or ankle to swell.

Varicose veins if untreated, can develop into the following:



- **How are varicose veins diagnosed?**

A duplex ultrasound assessment is the best way to diagnose varicose veins. During the assessment, a water-based gel is spread on to the skin of your leg from groin to ankle and an ultrasound probe is run over the skin to give a picture of the veins and the direction of blood flow. This scan provides a “map” of the varicose veins in your leg to determine which treatment will be the best option for you. As the main veins in your leg (the deep veins) are also checked during the scan, any underlying problems affecting your treatment will also be identified.

- **What is Radiofrequency Endovenous treatment and how does it work?**

Radiofrequency generates gentle and controllable heat which seals the veins from the inside. A small (2mm) incision is made in the skin of the low thigh and a catheter inserted in to the vein using ultrasound guidance. Anaesthetic fluid is then injected around the vein to numb the area and protect the tissue from heat. As the catheter is withdrawn, radiofrequency energy (heat) is applied to the vein wall, sealing the vein. The treated vein shrinks and becomes a harmless cord over time.

- **How long does the RFA treatment take and can I drive afterwards?**

RFA treatment is usually carried out under local anaesthetic and takes approximately 30-40 minutes, though you can expect to be at the clinic for 1-2 hours on the day of your treatment. You will be able to go home on the same day; however, you will **not** be able to drive.

**We advise you arrange for someone to drive you home after your procedure. If you attempt to drive after your procedure, in the event of an accident your insurance provider may not cover you.**

- **What are the benefits of RFA treatment?**

Compared to conventional varicose vein surgery, where the faulty vein is “stripped” from the leg (usually under general anaesthetic), RF treatment has several benefits:

- Local anaesthetic
- Minimal scarring – usually one 2mm scar
- Less painful – most patients don't even need a paracetamol!
- Less bruising
- Shorter recovery time – patients can resume normal activities within an hour
- Fewer complications

- **What are the possible side effects or complications of RFA treatment?**

As with any medical procedure, some side effects or complications may occur. It is important to discuss any existing medical conditions or concerns with your consultant prior to going ahead.

Side effects are rare and usually minor:

- Minor pain/discomfort and bruising, which can be treated with common pain relief (paracetamol/ibuprofen)
- Tingling or numbness, or a “pulling” sensation in the thigh
- Burning sensation in the varicose veins (phlebitis)
- Wound infection
- Skin discolouration

In less than 0.5% of cases more serious side effects can occur, specifically deep vein thrombosis (DVT) or pulmonary embolism (PE).

- **What is a Deep Vein Thrombosis (DVT) and a Pulmonary Embolus (PE)?**

A DVT is the formation of blood clot in the deep veins, usually in the leg, which can cause pain and swelling. The risk of DVT is increased by any type of surgery but is an extremely rare side effect of RF treatment.

A PE is blood clot which blocks of the vessels in the lung and can sometimes occur following a DVT. PE causes chest pain and breathlessness and may even be fatal.

- **How effective is RFA treatment? Does it hurt?**

Studies have repeatedly shown that RFA treatment provides significantly better outcomes than conventional surgery in terms the appearance and symptoms of varicose veins, and the overall patient experience.

There is a little pain when local anaesthetic is injected to make the small cut and feeling of pressure in the leg when the anaesthetic is injected around the vein. There should be no pain when the vein is treated with heat.

After treatment patients may feel a ‘pulling’ or tightening sensation as the vein heals and occasionally burning sensation in the vein (phlebitis) which usually settles within 1-2 weeks.

- **Do I need to make any special preparations for the treatment?**

You will need to ensure that you wear loose fitting trousers or a skirt because dressings may be applied after the treatment.

## Pre and Post-Procedure Information for Patients

### **On the day of your treatment**

Please do not use bath oils, lotions or creams on your leg(s) for 24 hours before your treatment.

Make sure that you have had something to eat and drink on the day of your treatment – it is important that you are well hydrated before your procedure.

Please dress in loose clothing, jogging bottoms or a skirt and comfortable shoes when you come for your treatment, and please ensure that you bring a dressing gown and some slippers (or other flat shoes) with you to the clinic.

**On the day of your treatment, we advise you arrange for someone to drive you home after your procedure. If you attempt to drive after your procedure, in the event of an accident your insurance provider may not cover you.**

### **What to expect after your treatment?**

Although many patients do not require pain relief, if you feel that you do then simply take whatever you would do for a headache (e.g. paracetamol, ibuprofen), in accordance with the instructions on the medication packet. These can be purchased from a chemist/supermarket without prescription.

Aching in the treated area of the leg can occur for a week or so after the procedure, and this is normal.

It is sometimes possible to feel the treated vein like a thick cord under the skin in the thigh. It may feel tight and inflamed initially but it should ease quite quickly, and should disappear after a few weeks.

### **Compression stockings**

Compression stockings make the radiofrequency treatment more effective and also help to reduce the risk of deep vein thrombosis.

After your procedure, the compression stockings should be worn day and night for one week. The stocking should ideally be kept on continuously for the first 36-48 hours following your treatment.

After the first 36-48 hours and only if the wounds have settled, the stockings can be removed if you wish to shower, but must be put back on immediately afterwards. After one week of wearing the compression stockings continuously, you should wear the stockings during the day (but not at night) for a further full week.

There are no restrictions on exercise or general activities following your procedure providing the compression stockings are worn.

### **Wounds and dressings**

If bleeding occurs from any of the small cuts on your leg, lie down/seated and raise the affected leg then apply firm pressure over the bleeding point using a clean towel or handkerchief until the bleeding stops.

The white protective dressings normally come off on their own, but can be peeled off after 7 days if they are still in place. Do not worry if these dressings come off when showering.

The small wounds under the dressings should be kept as dry as possible to promote healing and prevent infection. Although this is uncommon, if swollen, red or painful areas develop at the site of these small cuts, please see your GP in case an infection has developed.

In order to keep the wounds dry, you are advised to only have showers for two weeks following your procedure. Do not soak in a bath until after this two-week period.

### **Resuming normal activities**

In order to aid circulation and reduce the risk of deep vein thrombosis, it is important to take some light exercise every day for an hour e.g. a half hour walk in the morning and evening.

You can drive as soon as you feel comfortable enough to perform an emergency stop without hesitation. For some people this can take as little as 2-3 days, but for others it may be 1-2 weeks.

Again, you can return to work when you feel well and comfortable enough to do so, and depending on your occupation. Please remember to try to keep mobile at work for the first two weeks following your treatment.

**Please allow one week before swimming or cycling post procedure. It is advisable to avoid flying for six weeks after your treatment.**

### **General information**

Some varicose veins may remain after the procedure – the purpose of radiofrequency is to treat the main source of these veins.

It is important to bear in mind that not all leg symptoms (aching, itching, swelling etc) experienced by patients with varicose veins are not actually caused by these veins. Though an aim of radiofrequency treatment is to improve these symptoms, this may not occur in every case.

If you have developed skin pigmentation in the areas of your varicose veins before your treatment, this will not disappear. The aim of the treatment is to stop this pigmentation from getting worse and developing in to ulceration.

Following your procedure, you may experience some altered sensation (tingling or numbness) near the small incisions made in the skin during your treatment. This can be caused by slight damage to nerves within the skin during the procedure; these symptoms may last for a few weeks but in some cases this can be permanent.

You may notice that the skin incisions appear red and prominent for several months after your treatment. This is part of the healing process, but should fade eventually to faint scars.

Again, if the skin incisions become very sore or inflamed, please see your GP in case an infection has developed.

### **Follow-up appointment**

- We will look to book you in for a face-to-face follow up appointment with your consultant, 6 weeks after your treatment.

## **Out of hours Care**

- If you require medical attention or advice outside of our clinic hours, please call NHS 111 for further advice. Encase of emergencies, please call 999.