

**Patient  
Information**

# Radiofrequency Ablation (RFA) for varicose vein treatment

## Introduction

This leaflet gives you information about Radiofrequency Ablation (RFA), a minimally invasive (keyhole) treatment for varicose veins. It also answers some of the commonly ask questions RFA.

## What are varicose veins?

Varicose veins are enlarged veins in your leg which happen when there is a fault in the one-way valves inside the veins. These veins normally only allow blood to flow back to the heart. If the valves are not working properly, when you stand the blood may flow in the opposite direction. This causes increased pressure inside the vein. The vein then stretches and becomes swollen.

## Symptoms of varicose veins

These may include aching, throbbing, itching, varicose eczema (red itching and inflamed skin), skin discolouration and/or ulceration, thrombophlebitis (clotting and inflammation of the veins) and occasional bleeding from the veins if knocked.

## About your procedure

When you come into hospital the healthcare team will carry out a number of checks including consent for the procedure. They may mark the location of your veins with a pen.

RFA is usually carried out under local anaesthetic (while you are awake). Local anaesthetic is injected around the faulty vein to numb the area.

Some patients may need a general anaesthetic for the procedure. Your surgeon will discuss this with you.

Reference No.

**GHPI1498\_02\_25**

Department

**Vascular**

Review due

**February 2028**

## Patient Information

RFA is a procedure which closes the faulty superficial vein and leaves minimal scarring. A catheter will be placed into the faulty vein using an ultrasound scan for guidance. Once the catheter is in the correct position, a liquid containing local anaesthetic is injected around the vein. Radiofrequency energy is used to heat the catheter which applies direct heat to the vein wall causing it to shrink and seal.

Other varicose veins in your leg may be removed through small cuts (phlebectomies) or be injected with chemicals to close them (foam sclerotherapy).

### Wound care

Following your procedure, you may have bandages or an elastic compression stocking on your leg(s). These should be left on for at least 1 to 2 weeks; specific advice will be given to you on the day of your procedure.

### After the procedure

Usually, you are able to go home shortly after the procedure, providing there is someone at home to look after you for 24 hours. Please arrange for someone to collect you from the hospital as you cannot drive straight after the procedure.

The day after your treatment you are advised to keep mobile and gradually increase the amount of gentle exercise you take each day. When you are resting you should put your leg up on a stool or settee. It is not advisable to do strenuous exercise in the first few weeks after the procedure.

### Benefits of RFA

- Improves your symptoms relating to your varicose veins.
- Allows any leg ulcers to heal more quickly and help to prevent future ulcers.
- Avoids cuts in the groin and stripping of the thigh vein. This reduces the chances of extensive bruising and pain or getting a wound infection following the procedure.
- The procedure is often carried out under local anaesthetic which will allow a quicker return to normal activity.

## Patient Information

- The procedure is performed as an outpatient/day case allowing you to return home on the same day.
- The appearance of your veins will be improved.

### Risks/side effects

- You may have some pain and discomfort along the line of the treated vein for 2 to 3 weeks after the procedure. This usually settles after a few weeks.
- Bruising is common. You may get a collection of blood under your skin (haematoma). This will settle over time.
- Some varicose veins may remain despite treatment.
- Varicose veins may come back in about 1 in every 10 people over a 5 year period.
- You may develop inflammation of the treated veins which will cause lumpiness and discomfort around the vein. This is known as phlebitis and should settle after a few weeks but may last for several months.
- The heat from the catheter can sometimes bruise nerves close to the treated vein, causing numbness. This is uncommon and usually temporary.
- Very rare but more serious nerve injuries associated with the treatment to the vein at the back of the knee (short saphenous vein). This may include foot drop, (inability to effectively lift your foot) and numbness to the outer aspect of your foot.
- Burns and blistering to the skin can happen due to the heating process but this is very rare.
- Infection is rare.
- Skin staining may happen (a brown line along the treated vein), this usually pales over time but in some cases may be permanent.
- Deep Vein Thrombosis (DVT), this is a formation of a blood clot in the deep veins of the leg and can happen in 1 in every 100 cases causing pain and swelling in the calf.

## Patient Information

- Pulmonary Embolism (PE) is extremely rare. This is a serious condition that happens when a blood clot breaks off from the deep veins in the treated leg and blocks one of the blood vessels in the lungs. This may cause shortness of breath, pain in the chest and/or coughing up blood. If you think you have any symptoms of DVT or PE you should seek urgent medical attention by attending the Emergency Department for further scans. You may also require blood thinning medication for about 3 months.

## Alternative treatments

- Elastic compression stockings can help the symptoms caused by varicose veins.
- Foam sclerotherapy injection is a procedure where a chemical is injected into the faulty veins and causes them to seal.
- Open varicose vein surgery involves disconnecting and removing the faulty superficial veins; usually under a general anaesthetic.

Not all varicose veins are suitable for RFA treatment. Your healthcare team will be able to discuss this with you.

## Returning to work

You can return to work when you feel able, although it is advisable to take at least 48 hours off after the procedure. Sometimes, a week off work may be needed. It is important that you walk and keep mobile in the first few weeks after the RFA treatment. This will help to prevent blood clots in the veins.

## Driving

You should not drive, operate machinery or do anything strenuous for at least 48 hours. Following the 48-hour period you can drive as soon as you are able to perform an emergency stop safely and without hesitation.

## Flying

Travelling by aeroplane is **not** advised for 4 weeks following the procedure.

**Patient  
Information**

## Medication

Let your healthcare team know about all the medication you are taking and follow their advice.

Following your procedure, pain relief such as paracetamol, ibuprofen and/or codeine may be taken until any discomfort settles down. This will be discussed with you before you go home.

## Follow up

You will not normally have a follow up clinic appointment after the procedure. If you have any worries or concerns, contact your GP for advice.

## Contact information

If you have any questions, please contact the consultant looking after you via the hospital switchboard:

**Gloucestershire Hospitals NHS Foundation Trust**

Tel: 0300 422 2222

When prompted ask for the operator, then for the consultant looking after you.

## Further information

National Institute for Health and Care Excellence (NICE)

Website: [www.nice.org.uk/IPG008guidance](http://www.nice.org.uk/IPG008guidance)

Website: <https://cks.nice.org.uk/topics/varicose-veins>

## NHS Choices

Website: [www.nhs.uk/conditions/varicose-veins/treatment/](http://www.nhs.uk/conditions/varicose-veins/treatment/)

Content reviewed: February 2025

## Making a choice

### Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.



### Ask 3 Questions

**To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.**

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation

\* Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;84: 379-85



<https://aqua.nhs.uk/resources/shared-decision-making-case-studies/>