

# Radiofrequency ablation of varicose veins

**Understanding NICE guidance –  
information for people considering the  
procedure, and for the public**

September 2003



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## **Radiofrequency ablation of varicose veins**

### **Understanding NICE guidance – information for people considering the procedure, and for the public**

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#### **To order copies**

Copies of this booklet can be ordered from the NHS Response Line; telephone 0870 1555 455 and quote reference number N0270.

A version in Welsh and English is also available, reference number N0271. Mae fersiwn yn Gymraeg ac yn Saesneg ar gael hefyd, rhif cyfeirnod N0271. The NICE interventional procedures guidance on which this information is based is available from the NICE website ([www.nice.org.uk](http://www.nice.org.uk)). Copies can also be obtained from the NHS Response Line, reference number N0269.

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## About this information

This information describes the guidance that the National Institute for Clinical Excellence (NICE) has issued to the NHS on a procedure called **radiofrequency ablation for varicose veins**. It is not a complete description of what is involved in the procedure – the patient’s healthcare team should describe it in detail.

NICE has looked at whether radiofrequency ablation is safe enough and works well enough for it to be used routinely for the treatment of varicose veins.

To produce this guidance, NICE has:

- looked at the results of studies on the safety of radiofrequency ablation and how well it works
- asked experts for their opinion
- asked the views of the organisations that speak for the healthcare professionals and the patients and carers who will be affected by this guidance.

This guidance is part of NICE’s work on ‘interventional procedures’ (see ‘Further information’ on the last page).

## About radiofrequency ablation of varicose veins

Varicose veins are veins (usually in the legs) that have lost their elasticity and bulge with blood as a result. They happen if the valves in a vein become weak and let blood go the 'wrong way' back through the vein. Over time, the vein has to become wider to cope with the extra blood and this eventually means that it loses its elasticity. A person with varicose veins can feel pain in the affected area, their legs can feel tired and can swell, the skin can start to look different and ulcers can appear in the area.

Radiofrequency ablation of a varicose vein involves using radiofrequency energy to heat the wall of the vein so that it collapses. This causes the vein to close and seal up. Blood is redirected through nearby healthy veins as a result. For a varicose vein in the leg, the doctor inserts the heating device either through a small cut in the skin made above or below the knee (depending on the area to be treated), or through a tube that is run into the vein under the skin. Once in place in the vein, the device is slowly pulled back through the vein so that it heats and seals the vein as it goes.

The alternative to closing the varicose vein in this way is to remove it in a procedure called 'stripping'.

## ***How well it works***

### **What the studies said**

The studies NICE looked at show that the procedure resulted in the closure of all or nearly all of the treated veins. In one study, patients who had radiofrequency ablation had less pain and needed fewer painkillers than those who had the standard procedure (stripping).

In general, only a small number of people continued to have symptoms such as leg pain, leg tiredness, swelling and noticeable varicose veins after the procedure. People who'd had the procedure seemed satisfied with the results.

### **What the experts said**

The experts said that although radiofrequency ablation seems to work well in the short term, the long-term results aren't yet known.

## ***Risks and possible problems***

### **What the studies said**

In one study, patients who'd had radiofrequency ablation had roughly the same number of problems as patients who'd had stripping – in both groups, about half of the patients had a problem after the procedure. Other studies showed that

skin burns happened in a small proportion of patients who had radiofrequency ablation. Some patients had abnormal sensation in their leg after radiofrequency ablation – this was more common in patients where the vein that was treated was below the knee. In a small number of patients, the vein became inflamed after the procedure. Serious problems such as deep vein thrombosis (blood clots in the deep veins) and pulmonary embolism (blockage of a blood vessel in the lung) were rare, affecting less than 1 person in 100.

### **What the experts said**

The experts agreed with the results of the studies outlined above.

## What NICE has decided about radiofrequency ablation for varicose veins

NICE has considered the evidence on radiofrequency ablation. It has recommended that when doctors use radiofrequency ablation for people with varicose veins, they should be sure that:

- the patient understands what is involved and agrees to the treatment, and
- the results of the procedure are monitored.

## What NICE's decision means for you

Your doctor may have offered you radiofrequency ablation for varicose veins. NICE has considered this procedure because it is relatively new. NICE has decided that the procedure is safe enough and works well enough for use in the NHS.

Nonetheless you should understand the benefits and risks of radiofrequency ablation before you agree ('consent') to it. Your doctor should discuss the benefits and risks with you. Some of these benefits and risks may be described above.

## Further information

You have the right to be fully informed and to share in decision-making about the treatment you receive. You may want to discuss this guidance with the doctors and nurses looking after you.

You can visit the NICE website ([www.nice.org.uk](http://www.nice.org.uk)) for further information about the National Institute for Clinical Excellence and the Interventional Procedures Programme. A copy of the full guidance on radiofrequency ablation for varicose veins is on the NICE website ([www.nice.org.uk/IPG008guidance](http://www.nice.org.uk/IPG008guidance)), or you can order a copy from the website or by telephoning the NHS Response Line on 0870 1555 455 and quoting reference number N0269. The evidence that NICE considered in developing this guidance is also available from the NICE website.

If you want more information on varicose veins, a good starting point is NHS Direct, telephone 0845 46 47, or NHS Direct Online ([www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)).

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