

# Endovenous mechanochemical ablation for varicose veins

Information for the public

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## What has NICE said?

Endovenous mechanochemical ablation for varicose veins is safe enough and works well enough for use in the NHS

## *What does this mean for me?*

Your health professional should fully explain what is involved in having this procedure, and discuss the possible benefits and risks with you. You should also be told how to find more information about the procedure. All of this should happen before you decide whether you want to have this procedure or not.

## *Other comments from NICE*

NICE heard that the procedure might also be useful for treating short saphenous veins and in patients with venous leg ulcers.

## The condition

Small valves inside the veins help blood to flow properly through them. Varicose veins develop when these valves do not work properly, allowing blood to collect in the veins. The veins then widen and this causes the valves to deteriorate further. The great saphenous vein (a vein that runs just beneath the skin from the foot up to the thigh) is most commonly affected.

Many people have no symptoms from varicose veins but, if they do, these can include heaviness, aching, throbbing, itching, cramps or tiredness in the legs. If the symptoms become severe (with skin discolouration, inflammation or skin ulcers), people may be offered surgery to remove or tie off the affected veins, or procedures to close the veins using lasers, chemicals or heat energy.

NICE has looked at using [endovenous mechanochemical ablation](#) as another treatment option.

[NHS Choices](#) and NICE's information for the public about [varicose veins in the legs](#) may be a good place to find out more.

## The procedure

The aim of endovenous mechanochemical ablation is to close the varicose vein. The procedure is done using local anaesthetic. Ultrasound imaging is used to identify the vein needing treatment. A tube with a rotating hollow wire at its tip is inserted through the skin into the affected vein in the leg. As the tube is pulled back out of the vein, the wire is rotated, damaging the lining of the vein. At the same time, a chemical is injected through the hollow wire into the vein, causing it to shrivel and close. Patients are advised to wear compression stockings for about 2 weeks after the procedure.

## Benefits and risks

When NICE looked at the evidence, it decided that endovenous mechanochemical ablation for varicose veins is safe enough and works well enough for use in the NHS. The 9 studies that NICE looked at involved a total of about 930 patients.

Generally, they showed the following benefits:

- less pain during and after the procedure than with radiofrequency ablation, and a similar improvement in symptoms
- effective closure of 81–95% varicose veins
- return to usual activities within 1–4 days.

The studies showed that the risks included:

- a blood clot in a leg in 1 patient and in a lung in 2 patients, which got better after drug treatment
- temporary nerve injury causing hypersensitivity in the lower leg in 1 patient

- inflammation of a blood vessel in the treated leg in 0–14% of patients
- hardening and pain at the injection site in 12–18% of patients
- abscess at the injection site in 1 patient and a mild wound infection in 1 patient
- bruising at the injection site in less than 1% to 9% of patients
- changes in skin colour in 5–12% of patients.

If you want to know more about the studies, see the [guidance](#). Ask your health professional to explain anything you don't understand.

## Questions to ask your health professional

- What does the procedure involve?
- What are the benefits I might get?
- How good are my chances of getting those benefits? Could having the procedure make me feel worse?
- Are there alternative procedures?
- What are the risks of the procedure?
- Are the risks minor or serious? How likely are they to happen?
- What care will I need after the procedure?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

## About this information

NICE [interventional procedures guidance](#) advises the NHS on the safety of a procedure and how well it works.

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## Accreditation

