East Kent Hospitals University NHS Foundation Trust

Varicose veins

Information for patients about varicose veins and their treatment

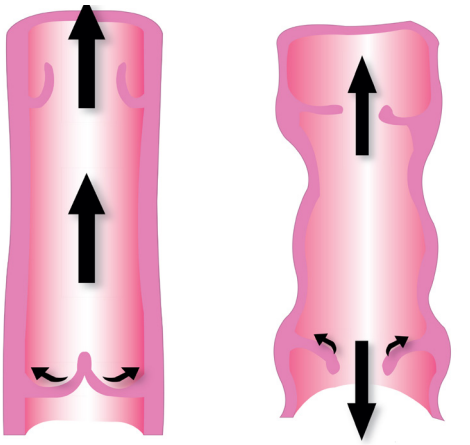
This leaflet is not meant to replace the information discussed between you and your doctor, but can act as a starting point for such a discussion or as a useful reminder of the key points.

What are varicose veins?

Varicose veins are abnormally swollen veins which can be seen just below the surface of the skin. Smaller veins in the skin itself are sometimes called **thread veins** or **spider veins**. Although these may be unsightly, they are not the same as varicose veins and do not affect your physical health.

What causes varicose veins?

Varicose veins are often due to a fault in the one-way valves in the veins, which normally only allow the blood to flow up the leg, towards the heart via the deeper veins. If the valves leak, then blood flows back the wrong way on standing and straining. This reverse flow causes increased pressure on the surface veins which swell and become varicose.



Normal vein Varicose vein

Varicose veins often run in families and are more likely to develop as we get older. They may also be caused by pregnancy, weight gain, or deep vein thrombosis (DVT) which all increase pressure on the leg veins. Conversely, acute phlebitis sometimes gets rid of the vein involved.

Varicose veins are classified from CEAP 0 to VI according to severity. Zero being no varicose veins and VI being leg ulcers due to varicose veins. Health authorities (CCGs) allow treatment with support stockings for classes I and II; but laser, injection, or surgical treatments can be offered as well for classes III to VI; this restriction is contrary to NICE guidelines but widely applied across the NHS.

We care

What trouble do they cause?

Varicose veins are very common, affecting one in three women and one in five men. They often give no symptoms, although they may look unsightly. However, aching, swelling, throbbing, and itching in the leg are common, especially after periods of standing; and ankle swelling (**oedema**) may also occur.

Varicose veins occasionally bleed, which can be dangerous. Sometimes one of the veins can become red, hard, and tender; this inflammation is called **acute phlebitis**.

Severe, long-standing varicose veins may damage the skin of the leg above the ankle causing a rash (**eczema**), discolouration (**haemosiderosis**), and inflammation (**chronic phlebitis**). Without treatment, when severe, an ulcer (venous ulcer) may eventually occur.

What tests are needed?

In most cases, a simple examination plus a painless test with an ultrasound machine may be all that is needed to enable your specialist to decide what needs to be done. This is true whether your veins are new or have appeared again following previous treatment.

Do I need treatment?

Treatment for varicose veins is rarely essential, since serious complications are uncommon. If your specialist thinks that you should have treatment, then you will be told of this and of the treatment options at your consultation. This is usual if your veins are class III or above.

Many patients have varicose veins for the whole of their adult life and never suffer any problems with them.

What treatment is available?

- **Support stockings** may be all that is needed if aching or swelling are the main problems (vein classes I to II). Properly fitted medium-weight class II compression stockings usually work best. Raising your feet when resting helps reduce symptoms and swelling, and a moisturiser can help with any itching you may have.

- **Injection therapy (sclerotherapy)**: a small amount of a special chemical (sclerosant) is injected into each varicose vein and the leg is then bandaged firmly for a time. The vein shrivels up and eventually becomes less visible.

  Smaller veins can be injected in outpatients, larger ones may be done in hospital using a sclerosant foam using ultrasound. More details are given on the next page but this is a simple, safe, and effective outpatient treatment for most patients.

- **Surgery**: more severe varicose veins (classes III to VI) can also be treated with surgery, usually needed only for very large varicosities. The veins are removed (avulsed) through a number of small cuts and the leaky valves are tied off at the groin or knee. The main groin or knee vein is usually removed (stripped) to reduce the risk of varicose veins returning.

More detailed information about these procedures is available by asking your specialist and there is further information on the next page.

What is injection therapy (sclerotherapy)?

- **About the treatment:** injection therapy (sclerotherapy) is usually suitable both for larger veins with symptoms and for relatively small varicose veins (and for thread veins that are unsightly but cause no symptoms, this is not available on the NHS). The injections work by causing inflammation which destroys the vein leaving an invisible scar, once the inflammation fades. Ultrasound is used for planning the treatment and also to guide treatment for larger veins.

- **Before your treatment** please read the Trust leaflet **Injection sclerotherapy for varicose veins** and visit the web sites listed on page five of this leaflet, to make sure you have a good understanding of the pros and cons of this treatment. Many patients can continue with their normal daily activities but if you have a job that involves a lot of standing or heavy work, please arrange to have an easy few days after your injection. For the first few days after your treatment, avoid commitments that will prevent you from resting, just in case.

- **At your treatment session** a small amount of an irritant fluid or foam (sclerosant) is injected into your vein(s) at one or more sites and pressure pads applied. An elastic stocking or bandage is then put on to your leg and a stocking placed over this to keep the bandage in place. It is better if only a few veins are treated at one visit to limit the amount injected and repeat sessions are safest if you have many veins. Please do not drive yourself home from the clinic, if possible arrange for someone to collect you or take a bus or taxi. It should be alright to drive the day after your treatment.

- **After your treatment,** for the first week take several short daily walks and try to avoid standing still for any length of time. In between, rest with your legs elevated (raised). After three days, remove the bandage and pads, if used, and wear the stocking for two weeks during the day but it can be removed in bed or when taking a bath or shower. You may return to work or sports when comfortable and should continue to do plenty of walking and avoid standing still if possible. The success of injection treatment relies upon the pressure that the bandages and stocking apply to the injected area. Wear the stocking for at least two weeks or longer until your leg is completely comfortable when you are standing. You should continue dieting and exercise if you are overweight and will need stockings long-term if your veins are class IV to VI.

- **What to expect after your injections:** for the first few weeks or months following your injection, any slight discomfort, hardness, discoloration, or tenderness at the injection site(s) should gradually go down. If there is a lot of redness, swelling, or tenderness, you may have phlebitis. This means you should rest more with your leg elevated, painkillers like ibuprofen or Voltarol gel may help, and you should ask for medical advice.

- **Complications:** while most patients have no problems after injection of varicose veins, some may experience one or more of the following, the first of these is a normal part of the treatment working.
  - A persistent hard cord or lumpiness in the line of the vein, it will go eventually.
  - Brown staining of the skin in the line of the vein, commoner with a fair complexion.
  - Rarely, ulceration of the skin at an injection site if the injection misses the vein.
  - Failure of the injection to obliterate the vein is unusual, less than one in 10 at first attempt.
  - Some patients may cough or report lights in their eyes, especially in migraine sufferers.
  - Less than one in 100 patients will develop a deep vein thrombosis (DVT), and an even smaller number are at risk of clots in their lung (less than one in 1000 patients) or elsewhere (if you have a hole in your heart, and this affects less than one in 100,000 patients) which could cause a stroke.

For the future it may be advisable for you to wear light support stockings or tights and to aim to keep to a normal weight to try to reduce further varicose veins developing.

What will happen if I choose to have surgery?

- **Coming into hospital** please bring with you any medicines you are taking and show them to your doctor. You will be greeted on the ward by a nurse who will check your personal details. You will also be visited by your surgeon, who will mark the position of your veins and ask for your consent, and by your anaesthetist. Many people are concerned about anaesthetics, so please ask your anaesthetist if you have any specific worries. We are happy to answer any questions you may have, so please ask. Remember you can withdraw your consent for treatment at any time.

- **The operation** is usually done under a general anaesthetic (you are asleep). The most common operation is where a cut is made in your groin over the top of the main varicose vein. This is then tied off where it meets the deeper veins. If possible, the main varicose vein is then stripped out of your thigh. Blood can still flow up your leg, along other unaffected veins. The cut in your groin is usually closed with a dissolving stitch. The other veins, that were marked before your operation, are then pulled out through small cuts (avulsions) which are closed with adhesive strips. Some other veins may be affected, especially one behind your knee. This is treated like the vein in your groin.

  Dressings are placed on the cuts and your leg is bandaged up to the thigh or placed in a support stocking. You are normally allowed home later the same day.

- **Advice when going home**: the morning after surgery, any bandage may be removed and replaced by an elastic stocking. You will be supplied with the elastic stocking which you will need to wear according to your surgeon's instructions. Shower or bathe in the usual way after the first week and remove the dressings when wet.

  For the first week sit with your legs elevated so that your feet are higher than your hips, to reduce swelling and help healing. Several times a day take a short walk (a few hundred yards will do, but more if you wish) to avoid stiffness in your muscles and joints. Some discomfort is normal but occasionally severe local twinges of pain may occur and may continue for some months. After your operation you may need to take a mild painkiller such as paracetamol to reduce your discomfort.

  Dissolving stitches are commonly used but any non-dissolving stitches you may have can be removed by your GP, practice nurse, or district nurse about 10 days after your surgery.

- **After your operation** you should avoid driving for at least two weeks after your operation because, in an emergency, your response time may not be as quick as usual. It is essential that you can perform an emergency stop without pain. If in doubt, do not drive again until you are happy. Swimming and cycling are allowed after the first week when your dressings have been removed, if your wounds are healed.

  You can return to work when you feel well enough and comfortable, usually after one to four weeks depending on whether your job involves a lot of standing or heavy work. The hospital will provide a sick note and your GP can advise you further about returning to work.

  You will have been warned that not every visible vein will disappear as a result of your operation. There is also a chance that further varicose veins may develop in the future, as you are clearly disposed to them. Regular exercise, avoiding becoming overweight, and wearing light support tights or stockings will all help prevent you being troubled by varicose veins in the future.

- **Complications after surgery:** while most patients have no problems after surgery for varicose veins, some may experience one or more of the following.

  Sometimes **a little blood will ooze from your wounds** during the first 24 hours. This usually stops on its own with pressure on your wound for 10 minutes. If bleeding continues after doing this twice, please go to the Urgent Treatment Centre at Kent and Canterbury Hospital.

  Occasionally, **hard, tender lumps** appear near your scars in the line of the removed veins. These can appear even some weeks after your operation and need not be a cause for concern. However, if they are **accompanied by a lot of swelling, redness, and pain**, this may mean you have a wound infection and you should see your GP. The scars on your legs will continue to fade for many months. Sometimes thread veins appear where varicose veins are removed.

  Rarely, there is **numbness around your wound or ankle**, due to injuring small skin nerves alongside the vein during your operation; this usually settles after some weeks or months.

  In one in 500 patients, operating on the vein behind their knee also **risks injuring a nerve** that lifts the foot and toes (popliteal nerve) causing their foot to droop.

  After any operation there is a **risk of clots in the leg veins** (DVT), in varicose vein surgery this risk is up to one in 100 patients. Around two thirds of these are small and not dangerous and are treated with Warfarin tablets for three months. Larger blood clots can impair the circulation of the blood through your leg and may result in chronic swelling and discomfort leading to ankle ulcers. In around one in 10 DVT patients, the clot breaks away and is carried in the blood to the heart, and from there to the lungs or elsewhere. This is called an **embolism** and can be dangerous. The risk of a fatal clot embolism after varicose vein surgery is around one in 10,000.

How good is the treatment?

No treatment will completely remove every visible varicose vein and there is no such thing as an **invisible mend**. Injections may cause some skin staining (small brownish patches) and surgery leaves some small scars. New varicose veins can appear even after satisfactory treatment. However, it may be many years before they return.

How can I help myself?

Avoid being overweight. Wear support stockings if you have to stand up a lot of the time. Regular exercise also helps. Dry, itchy skin can often be helped by bland moisturising (emollient) creams or bath additives.

Useful web site

- **The Vascular Society for Great Britain and Ireland**
  Web: www.vascularsociety.org.uk

This leaflet has been produced with and for patients

If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

Any complaints, comments, concerns, or compliments please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 78 31 45, or email ekh-tr.pals@nhs.net

Patients should not bring in large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

Further patient leaflets are available via the East Kent Hospitals web site www.ekhuft.nhs.uk/patientinformation

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