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Varicose Veins

An information guide

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Varicose Veins

Introduction

This leaflet tells you about varicose veins and the various treatment options available to you. It also explains the possible risks involved.

It is not a substitute for the advice the doctor or specialist may give you. Prior to any procedure you should have a full explanation of the procedure, and the risks involved, before signing the consent form.

What are varicose veins?

Veins carry blood (without oxygen) back towards the heart. In the legs this means veins carry the blood against gravity. This is helped by a one way system of valves and the calf muscle working as a pump.

Varicose veins are veins under the skin of the legs which have become widened, bulging and twisted (tortuous). They are very common and do not cause medical problems in most people.

There are two main systems of veins in the legs - the **deep veins** that carry most of the blood back up the legs to the heart, and the **superficial veins** under the skin, which can turn into varicose veins.

All veins contain valves, which should only allow the blood to flow upwards. If the veins become widened and varicose, these valves no longer work properly. This in turn allows the blood to flow backwards down the veins and causes the veins to swell and become varicose.

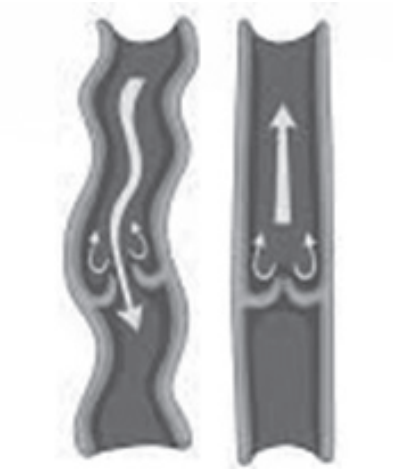

Figure . Blood flow and valves

What causes Varicose veins?

- Weakness or abnormality in the wall of your veins.
- Weakened valves.
- Prolonged standing.
- Raised venous pressure.
- Hormonal effects (e.g. pregnancy).
- Obesity.
- Age.
- Previous deep vein thrombosis (DVT) resulting in damage to the valves.

What symptoms do they cause?

Many people have no symptoms, except for the fact that veins are noticeable and their appearance may be distressing. Having varicose veins is not dangerous or harmful.

Common symptoms are aching and swelling, which are usually worse at the end of the day. For those with these symptoms surgical treatment is not recommended.

In some people, more severe symptoms can occur; the skin near the ankle can become brown in colour, sometimes with scarred white areas. Eczema (a red skin rash) can develop.

If these skin changes progress, or if the skin is injured, an ulcer may occur. Skin changes are therefore a good reason for going to see your GP for referral to a specialist for surgical management.

Varicose veins can occasionally cause phlebitis and bleeding. Phlebitis, sometimes called thrombophlebitis means inflammation of the veins, and causes the veins to become hard and tender. It does not mean that the veins necessarily need treating.

The risk of bleeding as a result of knocking the veins worries many people, but this is rare. It will always stop with firm pressure and elevation and the veins can then be treated to remove the risk of further bleeding.

What tests are required?

In most cases, a simple examination, plus an Ultrasound (duplex) scan is all that is required to enable your doctor to decide what needs to be done.

What treatments are available?

Simple lifestyle changes:

- Exercise will help keep the calf muscles healthy and improve blood circulation.
- Elevate your legs when possible and avoid standing for long periods of time.
- Weight loss.

Support stockings/ hosiery:

This means special stockings or tights that can be bought from the pharmacy or on prescription from your GP. The pressure in these stockings is designed to be gradually increased from the ankle. This helps return the venous blood back up the legs towards the heart

and can be effective in relieving symptoms of aching and heaviness associated with varicose veins.

Stronger support hosiery (graduation compression stockings) is more effective. They are made in above knee or below knee lengths with different "classes" of compression (Class 1, 2 and 3).

The current NICE guidelines for referral to Vascular services for management include bleeding varicose veins, skin changes or skin damage leading to eczema, pigmentation or ulceration.

However any offer for treatment will depend on local government / commissioning guidelines.

Radiofrequency ablation (RFA)

This is the process by which heat (using radiofrequency energy) is used to damage the incompetent (non-functioning) vein from the inside. This can be performed as a day case under either a local or general anaesthetic. It is common that subsequent foam sclerotherapy or avulsions may also be needed for prominent superficial varicose veins.

Figure 2. RFA catheter is placed inside the vein.

Procedure

An ultrasound machine is used to scan and mark the incompetent vein.

Local anaesthetic will then be used to numb the area where the surgeon will access the vein (usually near the knee). A needle is then used to puncture the vein to gain access; this is followed by a plastic tube to allow the RFA catheter to pass.

Before we can heat up the vein, more local anaesthetic mixed with a saline solution (tumescence) is infiltrated around the vein, again under ultrasound guidance to protect the surrounding tissue and vessels from heat damage. This may cause some discomfort as your leg fills with fluid and increases in pressure, this is normal. The area will then be numb.

We will then begin treatment by heating up the vein, the RFA catheter tip is gradually withdrawn destroying the vein as it goes. Pressure will be applied at the same time. The number of treatments will vary depending on the length of the vein.

The entry point will only need a steri-strip to close. Once this is completed we will then proceed to sclerotherapy or stab avulsions if indicated. A tight bandage will then be applied to your leg up to your thigh.

Post-Operative Care

- Your doctor will give you instructions on how long to keep these dressings in place (usually 48hrs), then special compression stockings to wear for up to 2 weeks.
- You should be able to immediately return to normal activities, but hot baths, vigorous gym workouts and heavy lifting should be avoided.
- Make sure you keep mobile and walk as much as possible. Frequent walking is more important than walking a long distance. When you are not walking about, try to put your legs

up. Avoid standing, or sitting with the foot on the floor, as much as you can for about two weeks after the operation.

- There may be some bleeding if you have had avulsions. The amount is likely to be very small and bleeding usually stops on its own. If necessary, press on the wound for 10 minutes with a dressing or pad of paper tissues. If bleeding continues after doing this, go to the accident and emergency department.
- Areas of tender lumpiness may also be felt elsewhere on the legs. This is caused by some blood clots under the skin where the varicose veins were removed. It is not harmful and will gradually go away, but it may take several weeks.
- There will be some bruising and soreness for 7 to 14 days after the treatment. You may need to take painkillers such as paracetamol or Ibuprofen (if you are able to take them), until the pain settles.
- Over time the treated vein will harden and can sometimes be felt or seen as redness to the skin. This will gradually reduce over time.

Follow-up appointments (face to face or telephone) may be scheduled to check your progress.

Foam sclerotherapy

The procedure takes approximately 10 to 20 minutes and can be done as a day case. You may eat and drink as normal and take any regular medicines as you will not need any anaesthetic

Foam sclerotherapy is performed by mixing a solution known as sodium tetradecyl sulphate with air. Turning the liquid into a foam. Using a small needle, the foam is injected directly into the visible varicose vein. The foam irritates and causes inflammation to the lining of the vein and in response the vein collapses and scars.

Once all this is completed padding and a bandage will be applied to help compress the vein. A tight bandage may be applied to your leg up to your thigh. This bandage is usually removed after 48 hours. A

light compression stocking from toe to knee may be applied after the bandage is removed. The doctor doing the procedure will give you post op instructions to follow.

Open surgery

Surgical stripping or tying of the vein used to be common practice this has now been replaced by radiofrequency ablation as first line treatment.

In some cases this may be still offered if you are not suitable for RFA.

A cut is made over the top of the main varicose vein and in the groin to expose the junction where the varicose vein meets the deep vein. It is then tied off where it joins the deep vein in the groin. A fine wire is passed into the varicose vein which is then stripped from your leg. The skin cut is closed with a suture.

Stab avulsions may then be performed, where tiny cuts are made above the visible varicose veins which are then removed.

Complications and Risks of all the procedures described above:

- Pain, bleeding, phlebitis (infection), discoloration or staining (mainly sclerotherapy may fade over time, however, sometimes it may be permanent).
- A common side effect of the procedure is redness and hardness along the length of the vein.
- Short term side effects include stinging and tingling sensations up the leg after injection.
- Nerve injury: There can be trauma to surrounding nerves, which can result in a transient numbness that will generally resolve on its own with time. In rare instances, the numbness may be permanent. This occurs down the inner thigh and sometimes below the knee into the foot. There is also a risk to the main nerves, which move the leg and foot. The risk of

nerve damage is increased when surgery is done after previous operations in the same area or veins treated below the knee.

- Blood clots (DVT): deep vein thrombosis causes swelling of the leg or calf (with or without tenderness) and can result in a blood clot passing to the lungs (PE). The risk of this is reduced by keeping active and avoiding sitting for long periods of time. An injection (heparin) is sometimes given to thin the blood to reduce the risks of thrombosis if you are at high risk of forming clots. If you are taking the contraceptive pill your risk of thrombosis is increased. The surgeon will discuss with you the pros and cons of stopping the pill or continuing taking it and reduce your risk of thrombosis. If you start taking the contraceptive pill whilst waiting for your operation, let the hospital know.
- With sclerotherapy patients may develop skin staining which may be permanent.

If you think you may be experiencing symptoms of a DVT you must get urgent medical advice or come to the A&E department.

- Rarer side effects include disturbed vision, an ulcer at the site of the injection and allergic reactions to medication.
- Recurrence of varicose veins and need for further treatment. Veins may regrow or open up again. We will bring you back to discuss your options.

When can I drive a car?

You can drive as soon as you feel confident that you can make an emergency stop without pain.

This is often about a week after surgery to one leg, or ten days after surgery to both legs. If you have an automatic car and surgery is to the left leg, then driving may not pose a problem. Please check with your insurance company before you drive.

When can I return to work and play sports?

You can return to work and sporting activity as soon as you feel sufficiently well and comfortable. If your job involves prolonged standing or driving, then you should not consider going back for at least two weeks.

Avoid contact sports while you are still in support stockings or bandages. Thereafter start with some gradual training, rather than immediate competition. Do not go swimming until you are out of support stockings and all wounds are dry.

Will all my symptoms resolve?

Symptoms will vary greatly from person to person. It is important to discuss your symptoms with your doctor prior to any procedure to discuss your expectations after treatment. It is common that symptoms such as pain, aching and swelling can overlap with other conditions and may persist even after you venous disease has been successfully treated.

Contact numbers

If you have any questions or queries you can contact your GP or the Vascular Team.

Hospital switchboard - Telephone: 0161 624 0420

Vascular Consultant Secretaries - Telephone:

0161 627 8698 / 0161 627 8981 / 0161 627 8826

Vascular Nurses - 0161 778 5090

Ward T3 - Telephone: 0161 627 8850

Smoking Cessation

Smoking cessation services are available locally for people who want to quit smoking or who have already decided to stop.

Bury Lifestyle Service contact the team on 0161 253 7554 or by email at: LifestyleService@bury.gov.uk

Heywood, Middleton & Rochdale Stop Smoking Support Clinics

Living Well contact the team on 01706 751190

Oldham

Positive steps contact the team on 0800 288 9008 Stop smoking advice and information is also available from the following:

- Your GP
- Your local pharmacy
- NHS Stop Smoking Helpline on: 0300 123 1044
- NHS Smokefree website: **www.nhs.uk/smokefree**

If English is not your first language and you need help, please contact the Interpretation and Translation Service

Jeśli angielski nie jest twoim pierwszym językiem i potrzebujesz pomocy, skontaktuj się z działem tłumaczeń ustnych i pisemnych

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Dacă engleza nu este prima ta limbă și ai nevoie de ajutor, te rugăm să contactezi Serviciul de interpretare și traducere

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إذا لم تكن الإنجليزية هي لغتك الأولى وتحتاج إلى مساعدة ، فيرجى الاتصال بخدمة الترجمة الشفوية والتحريرية

: 0161 627 8770

: interpretation@pat.nhs.uk

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For advice on stopping smoking contact the Specialist Stop Smoking Service on 01706 517 522

For general enquiries please contact the Patient Advice and Liaison Service (PALS) on 0161 604 5897

For enquiries regarding clinic appointments, clinical care and treatment please contact 0161 624 0420 and the Switchboard Operator will put you through to the correct department / service

The Northern Care Alliance NHS Group (NCA) is one of the largest NHS organisations in the country, employing 17,000 staff and providing a range of hospital and community healthcare services to around 1 million people across Salford, Oldham, Bury, Rochdale and surrounding areas. Our Care Organisations are responsible for providing our services, delivering safe, high quality and reliable care to the local communities they serve.

The NCA brings together Salford Royal NHS Foundation Trust and the hospitals and community services of The Royal Oldham Hospital, Fairfield General Hospital in Bury, and Rochdale Infirmary (currently part of The Pennine Acute Hospitals NHS Trust).

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