

Summer is coming so we asked Mr Sudip Ray, a vascular specialist in London and the Channel Islands, some common questions about varicose veins.

What are varicose veins?

Varicose veins are easily recognised as bluish worm-like cords around the thigh, knee and calf. They are surface veins that have become baggy or dilated, and are often worse towards the end of the day, especially after standing or exercise. They occur in around 20% of the population and are a common reason for cosmetic or medical consultation.

What causes them?

Varicose veins are usually associated with faulty valves within the drainage system of the leg. These valves normally ensure that blood is returned against gravity, but when they start to fail the surface veins are put under pressure and enlarge into varicosities. They are more common following pregnancies due to the pressure of the baby in the pelvis as well as hormonal changes which relax the vein walls. There may also be a genetic predisposition explaining why varicose veins sometimes “run in the family”.

UNDERSTANDING VENOUS REFLUX DISEASE
Healthy leg veins contain valves that open and shut to allow the return of blood back to the heart. Venous reflux disease develops when the valves that allow blood flowing out of the leg wall back to the heart become damaged or blocked. As a result, some veins will not close properly, leading to symptoms of:

- Aching veins
- Itch, heaviness and fatigue
- Swollen ankles
- Skin changes
- Spider veins
- Ulcers

THE VENOUS SYSTEM ANATOMY
The anatomical structure of a system of veins, including:

- Superficial veins: veins located close to the surface of the skin.
- Deep veins: deep and located deep in the leg.
- Perforating veins: veins that connect the superficial veins to the deep veins.

The small, one-way valves within the veins in the leg help to prevent the backflow of blood. In venous reflux disease, the valves do not work properly and allow blood to flow back down the leg.

EXPERIENCE THE VENEHT™ PROCEDURE
The Veneht™ procedure is a minimally-invasive outpatient clinic, using ultrasound and advanced endovenous laser technology, combined with the Veneht™ catheter, to deliver heat energy to the vein. The heat causes the vein to collapse and seal, so the vein will not be able to carry the harmful energy. As a result, the vein will close, and the vein will be sealed shut. This is the Veneht™ procedure, which is a closed, sealed, and minimally-invasive procedure.

PROCEDURAL HIGHLIGHTS*

- Most of symptoms within 2 days
- Outpatient procedure
- Can be performed under local anaesthesia
- The average patient typically resumes normal activities within a few days
- Patients receive high quality patient education and support**

VISUAL RESULTS*

RISK FACTORS

- Age
- Gender
- Family history
- Heavy lifting
- Multiple pregnancies
- Obesity
- Standing profession

CONTRAINDICATIONS

- Pregnancy
- Active infection
- Blood thinning medication
- Uncontrolled diabetes
- Uncontrolled hypertension
- Uncontrolled heart failure
- Uncontrolled kidney disease
- Uncontrolled liver disease
- Uncontrolled thyroid disease
- Uncontrolled asthma
- Uncontrolled anxiety
- Uncontrolled depression
- Uncontrolled bipolar disorder
- Uncontrolled schizophrenia
- Uncontrolled personality disorder
- Uncontrolled eating disorder
- Uncontrolled substance use disorder
- Uncontrolled gambling disorder
- Uncontrolled sexual dysfunction
- Uncontrolled sleep disorder
- Uncontrolled chronic pain
- Uncontrolled chronic fatigue
- Uncontrolled chronic headache
- Uncontrolled chronic sinusitis
- Uncontrolled chronic tonsillitis
- Uncontrolled chronic pharyngitis
- Uncontrolled chronic laryngitis
- Uncontrolled chronic bronchitis
- Uncontrolled chronic obstructive pulmonary disease
- Uncontrolled chronic asthma
- Uncontrolled chronic allergic rhinitis
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- Uncontrolled chronic allergic angioedema
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What symptoms do they produce?

They may cause discomfort and aching or feelings of heaviness, especially towards the end of the day or during periods. Occasionally the veins become hard ("phlebitis") or itch and bleed. Many years later, if severe and untreated, they may

produce pigmentation, eczema or even ulceration. They are not a cause of deep vein thrombosis following long flights or journeys though may be more uncomfortable at these times.

How do I know whether I have a significant valve problem?

The anatomy and function of leg veins can be determined by a simple, safe and painless ultrasound examination which takes around 20 minutes (see below). This provides a detailed map for the specialist to analyse, gives an indication as to whether they will worsen, and determines the best treatment option.



How can varicose veins be treated?

Some patients may gain relief from aching veins by wearing elastic support stockings obtained from the local chemist. If veins are particularly sore, large or unsightly then it is worth considering treatment using either a “keyhole” closure procedure or by injection therapy.

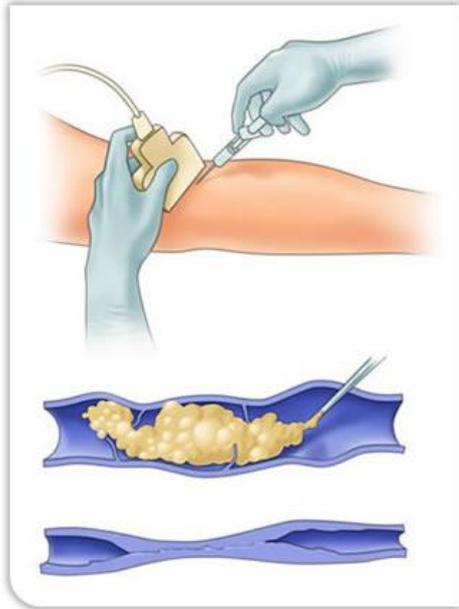
How do the keyhole closure procedures work?

A faulty vein inside the leg is sealed using either radiowaves or laser energy. This takes about 45 minutes under a local anaesthetic and is tolerated very well, with full recovery taking 1-2 weeks.

How do injections work?

Under ultrasound control a small amount of liquid detergent is injected into the veins with the intention of causing an

inflammatory reaction which obliterates the vein (see below). No anaesthetic is required and a bandage is worn for a week afterwards. In around 20% of cases further injections are required a few months later. Mixing the solution with air creates a more potent foam solution which is useful for larger veins.



How successful are vein treatments?

With the aid of ultrasound mapping it should be possible to improve the aching and appearance of the leg in 80-90% of cases following one treatment session. A few patients have a tendency to form new veins (recurrence) later on but these are usually small and respond to injections.

Mr Sudip Ray is a Consultant Vascular Surgeon with a particular interest in the treatment of varicose veins.

For further information/appointments please call please call 0208 971 8000 (London) or 01534 625000 (Channel Islands), or visit www.endovein.co.uk