What causes thread veins and varicose veins?

50% of the population will develop problems with their leg veins during their life. In most cases there is a family history so the cause is likely to be genetic. Women in particular find the appearance of thread veins quite distressing but can be reassured that:

a) though unsightly, they are unlikely to cause symptoms or medical problems;

b) they can be treated and their appearance can significantly be improved.

This clinic offers a thorough assessment and diagnosis of your veins to exclude underlying problems in order to offer the best treatment option for you.

What is Sclerotherapy?

Sclerotherapy is a safe, painless and well established treatment for thread veins on the legs. A solution is injected with a very tiny needle, very superficially into the veins, causing the lining of the vein to break down. This damage to the vein wall triggers a healing response which over several weeks causes the vein to close and fade away.

What result can I expect?

The results are not immediate. The veins look worse before they get better and the treatment may need to be repeated at 4-12 week intervals. Most patients see a 60-80% improvement in the appearance of the veins somewhere between one and four treatments.

Are the result permanent?

The veins that are successfully treated will not recover but this is a treatment for the symptoms not a cure for the underlying causes so new veins may develop over time.

Is this a safe treatment?

This is a very safe treatment but as with any other treatment, not entirely without risk. This treatment is not suitable for everyone. Your practitioner will take a medical history and discuss the possible risks and complications with you prior to treatment.

Is there any special aftercare?

You may resume normal activities immediately. You will be given special hosiery to wear for a week after the treatment. This looks like normal hosiery and you will have a choice of colours and styles. You will be advised to take a 10 minute walk immediately afterwards, to avoid high impact exercise for 2 weeks, no steaming hot baths, showers, saunas or sun beds for 2 weeks and no waxing for 4 weeks. Please discuss any long haul travel plans within 4 weeks of treatment with your doctor.

Are there any alternative treatments?

Your doctor will also be able to advise you on cosmetic camouflage to improve the appearance of your veins for particular outfits or events and the use of compression hosiery for the management of symptoms such as aching, swelling and itch.
Does it hurt?
This is not a painful procedure. The injections are made with a tiny needle and very superficially. The solution does not sting. Some people feel nothing whereas some others may feel little pricks, how uncomfortable varies from one person to another.

What will my legs look like immediately after the treatment?
The injections will cause some redness and welts, like insect bites. This will have gone by the time you take the stockings down. When you remove the stockings your legs will probably look bruised and the veins usually look worse before they look better. The veins are usually darker, sometimes with blue, black or brown spots under the skin.

The appearance has usually improved noticeably by day 10-14. At 4-6 weeks the thread veins should look pretty much as they did before injection and thereafter start improving. The full effect of the injection session is apparent at 12 weeks.

Please remember that everyone is different. Do not worry if the above does not apply to you. This is just a general pattern not a set of definite rules which define success or failure.

Will the thread veins come black?
Sclerotherapy is a treatment for the symptoms rather than a cure for the cause, other thread veins can develop. Most people need a top up session of treatment every 2 or 3 years.

You are recommending I see a vascular specialist but I don’t worry about my varicose veins, I just want to get rid of these thread veins.
If you are concerned about a puddle on the floor I can mop it up, if this has returned after a short time, I can mop it up again and again. We are then going to suspect a leak from the ceiling. If we ignore the leak, the ceiling will need repairing. If we ignore the source of the leak you will be wasting a lot of money on short term solutions.

How many treatments do you think I will need?
Budget for up to 4 treatments over a period of 4-12 months.

Remember it is not always possible to achieve 100% clearance but your doctor should aim for at least 60-80% improvement in their appearance.
Sclerotherapy is a safe, effective and well established treatment for thread veins on legs. Although there are a number of alternative treatments, it remains the most reliably successful of them all.

A solution is injected with a very tiny needle, very superficially into the veins, causing the lining of the vein to swell and become sticky. Compression is then applied to close the veins. Over a period of time the vein will heal closed and fade away.

Though safe, it is not entirely without risk. The two most common side effects are something called haemosiderin deposition and telangiectatic matting.

Haemosiderin deposition occurs when the vein is not entirely closed, blood is trapped and clots. In some people iron pigments leak from the clot and stains the skin over the vessel brown. These brown marks are usually not permanent but may take 6-12 months, should it persist, it can be treated with sclerotherapy if needles can access the fine vessels and flush the solution gently through.

Other risks are extremely rare but these include:

- **Allergic reaction** – any drug carries risk of allergic reaction. It is quite common for patients to experience some itching and some redness at the treatment site. This is no cause for concern and will pass within a few hours.

- If the solution irritates the tissue surrounding the vein, in rare instances blistering can occur. If left alone these can potentially lead to further blistering and scarring.

Finally, the results achieved after one treatment vary considerably from one client to another. You should budget for up to 4 treatments 4-16 weeks apart and you can expect an improvement in their appearance of 60-80%. In rare cases the treatment has little or no effect. Result cannot be guaranteed.

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**Varicose and thread veins explained.**

The veins in the legs have to return blood from the feet to the heart against gravity. There are two vein systems in the legs. The deep system lies within the muscles in your legs and carries 95% of the blood being returned to the heart. As the muscles in your legs contract these veins are squeezed forcing blood up them, valves attached the vein walls close to prevent blood falling back down the veins when the muscles relax. The second system is in the skin, not supported by muscles. As blood moves up the deep system it is drawn from the superficial veins onto the deep system.

Where varicose veins and sometimes thread veins, develop the valves in the veins are failing to work properly, blood is allowed to flow back on itself increasing the pressure in the veins system. This is called reflux. The deep veins cannot stretch because the are supported by muscle. The veins in the skin do stretch leading to a cycle of poorly functioning varicose veins, since as they stretch their valves do not meet to close.

In order to achieve good results with sclerotherapy we need to ensure your veins are not caused by reflux. If you do have reflux it is better to treat the refluxing veins first.

If we imagine the thread veins are as a puddle on the floor. We might simply mop the puddle up. If the puddle is caused by a leak in the ceiling this would only be a short lived solution. We should look up at the ceiling and if we see a leak send someone up into the roof to identify the source of the leak.
### Before treatment

- Do not use bath oils, lotions of creams on your leg for 24 hours before your injections;

- Dress in loose clothing, jogging trousers or skirt and comfortable shoes to accommodate the support hosiery;

- If you are going to be wearing compression stockings bring a suspender belt with you to hold up your support hosiery;

- If you have already been supplied with a support stocking, bring it with you on the day of treatment.

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### After treatment

- Take a 10 minute walk immediately after treatment.

- Wear your support hosiery day and night for 72 hours; at the end of the 72 hours you may take the stocking off and have a short cool shower or bath. Do not be alarmed that the thread veins look worse, this is normal at this stage.

- Thereafter, wear your support stocking during the day for 7 days; you may take them off at night.

- Avoid extremes of temperature for 14 days, i.e. very hot baths, saunas, sun beds.

- Avoid sun exposure for 4 weeks – pigmentation may take longer to fade.

- Avoid high impact exercise for 2 weeks.

- Avoid waxing of the legs for 4 weeks.

- Elevate your legs as much as possible for the first 2 weeks.

- If you are planning air travel discuss with your practitioner who will advise.

- Consider wearing support hosiery long term to minimise thread vein recurrence.
Mechanism of action of Sclerotherapy

Endothelial Destruction

- Inflammatory action
- Blood coagulation (thrombus)

Fibrosis

- Organisation of thrombus

Obliteration of Vessel Walls

Recanalisation