

## Introduction to Microsclerotherapy ?

Thread, spider or red thread veins of the legs are a common problem which mostly affect women. These small veins can form anywhere on the leg from the top of the thigh to the ankle. While these veins pose no major health problems, they can cause discomfort and be unsightly. Microsclerotherapy can correct these unwanted thread veins and is 60 - 80% effective.

## What is Microsclerotherapy ?

It is a procedure in which a specially trained doctor or nurse injects a small amount of an irritant solution using a very fine needle into the thread veins. The solution displaces the blood within the vein causing it to turn white. It also irritates the vein making it swell and close, thus stopping blood from re-entering it. Research has shown that wearing compression hosiery following the procedure for a short while enhances and optimises the results. The treated veins may disappear within two weeks to two months. More than one treatment is usually needed, although most thread veins can be treated over a course of three to four sessions, each taking about 30 minutes. For very extensive thread veins a maximum of six treatments could be necessary but rarely more.

## What causes thread veins ?

The reason why some people are affected and others are not is unknown. There are though some predisposing factors. Heredity seems to play a part. Injury to the legs and long periods of standing are causative factors. In addition, more women than men seem to develop this condition as a result of pregnancy or hormones.

## Is Microsclerotherapy Painful ?

There is a little minor discomfort with a very slight burning sensation or irritation but this soon disappears.

## Can you prevent thread veins ?

The use of support hose, weight control and exercise may be beneficial.

## Will treated veins recur ?

Thread veins may recur. It may seem that a previously injected vein has recurred, whereas in fact a new thread vein has appeared in the same area.

## What Medication is Used ?

Fibrovein is licensed for the treatment of uncomplicated primary varicose veins, recurrent or residual varicose veins following surgery, reticular veins, venules and spider veins of the lower extremities that show simple dilation.

Fibrovein occludes veins by the process of sclerosis. The aim of sclerosis is to produce maximum endothelial damage with subsequent minimal thrombus formation leading to fibrosis of the treated vein. The inner layer of a vein is a layer of cells called the endothelium. It is this layer that prevents blood clotting in the veins the aim of sclerosis is to damage this layer.

## Are there any Side Effects with Microsclerotherapy ?

Provided that Fibrovein is injected correctly at the appropriate concentration then the only likely adverse reactions are pigmentation and thrombophlebitis.

Pigmentation is caused by haemosiderin staining of the dermis and looks like bruising over or around the treated blood vessel. The incidence is low and usually resolves over 12-18 months.

Mild thrombophlebitis is not uncommon after sclerotherapy and is due to trapped blood in the vein. It is usually localised and self limiting and easily aspirated at the follow up.

Occasionally people may be allergic to the product and reactions are usually mild but may result in anaphylactic shock. You must have received a test patch at this clinic within 12 months.

Necrosis and ulceration should be very rare and are caused by injecting outside the vein or from using too high a concentration.

The main advantage of applying compression post sclerotherapy is that it helps minimise the size of the sclerothrombus and soft thrombus formation.

Keeping thrombus to a minimum lowers the likelihood of pigmentation and thrombophlebitis after treatment.

Compression will also increase the flow through the deep venous system and thus help blood flow in legs which have compromised venous return.

Compression is usually applied using an elastic stocking, limited stretch bandage or both.

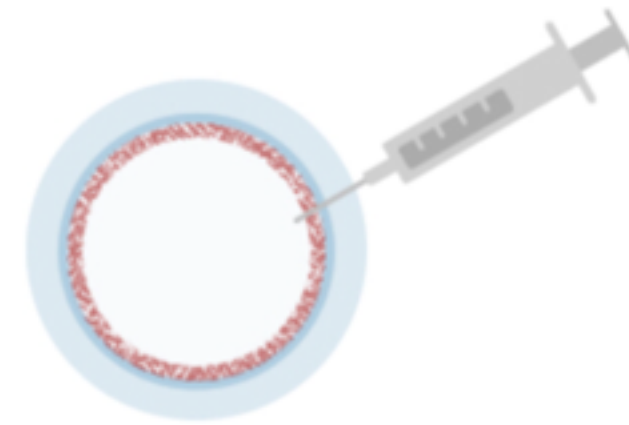


# How Does Fibrovein Work?

Fibrovein occludes veins by the process of sclerosis. The aim of sclerosis is to produce maximum endothelial damage with subsequent minimal thrombus formation leading to fibrosis of the treated vein. The inner layer of a vein is a layer of cells called the endothelium. It is this layer that prevents blood clotting in the veins the aim of sclerosis is to damage this layer.

## Endothelial damage

When injected into a vein Fibrovein displaces the blood and damages the endothelium by destroying the cell membrane.



Destruction of the endothelial cells results in the exposure of sub-endothelial collagen fibres in the vein wall.



## Reaction of the vein

As a response to the damage the vein usually goes into spasm and the clotting cascade is initiated with release of platelet factors.



## Vein occlusion

Essentially the damage caused by Fibrovein initiates the body's wound healing response and as soon as fresh blood passes through the sclerosed vein it clots and sticks to the damaged vein wall.



The blood forms a hard 'sclerothrombus' firmly attached to the vein wall. The hard sclerothrombus occludes the vein. Fibroblasts infiltrate the thrombus and begin laying down collagen fibre, reorganising the thrombus into scar tissue.

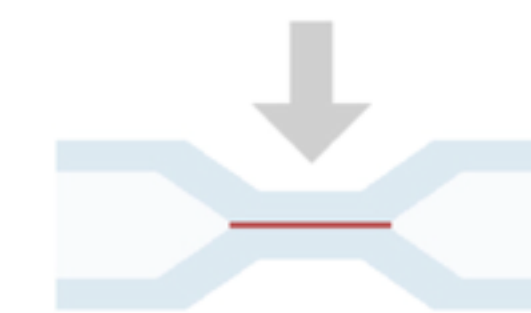


The body's healing mechanism converts the sclerothrombus and vein into a fibrous cord, resulting in complete obliteration of the vein.

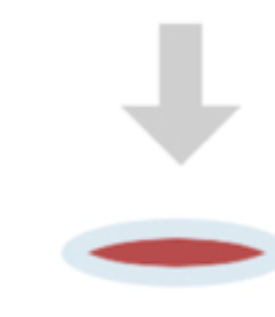


## Post Treatment Care

### Why use compression?



Ideally the sclerosed vein walls will touch and the thrombus kept to a bare minimum, this is quite difficult to achieve especially in larger truncal veins.



More likely is a small sclero-thrombus that blocks the vein and is then re-organised. Compression will keep the thrombus to a minimum.

Medical Grade medium support Hosiery is required Post Treatment, our recommended supplier [www.daylong.co.uk](http://www.daylong.co.uk)

You must attend a full consultation before booking a treatment, we will assess your suitability for treatment and if appropriate, a Test Patch will be administered, this a small injection, after 48 hours you can commence treatment. The test patch will be valid for 12 months, after which time you will require a new test patch.