

Complications of Sclerotherapy

Sclerotherapy – Risk or Remedy?

If you have varicose veins and you are considering treatment, please read this article carefully as you can save yourself a lot of frustration and unhappiness and even life long misery.

Sclerotherapy is frequently used in the treatment of varicose veins. Most varicose vein sufferers choose sclerotherapy in preference to surgery because of greater accessibility, much lesser cost and to avoid admission to hospital. Most of them are worried about having general anaesthetic with very well known side effects such as sickness, not being in control of ones body, increased risk of thrombosis and fear of never waking up. Most prospective patients accumulated some knowledge about surgical procedures from their family and friends. When asked about what they know about it, they usually tell the ‘horror’ stories for example of their Mother going through the terrible ordeal of long hospitalisation, atrocious bruising and difficult to control pain.

I have heard these stories repeated to me numerous times and no wonder that people try to delay for as long as possible any decision on treatment for many years and sometimes for a lifetime.

Delaying treatment leads to inevitable worsening of the condition as untreated varicose veins never get better by themselves. My enquiries showed that the great proportion of varicose vein sufferers would rather put up with terrible aesthetic consequences, disfiguration of their legs and never being able to show their legs to the public or even to their family, than to consider surgical options.

Further consequences of delay are progressive increase of pain in the legs, cramps, swelling, changes in shape of the legs which look, in the advance stages like a champagne bottle, changes in colour of skin which becomes darker, brown and then almost black resulting in ulceration.

Ulceration of the skin on the lower part of the leg is not a static problem and it gets progressively worse. If not vigorously treated, the leg might become completely denuded from skin. Progressive fibrosis restricts the circulation further leading to necrosis, which in some cases may require leg amputation.

The fear of undertaking treatment is so great that even knowledge about the consequences of not being treated isn't strong enough to overcome this anxiety.

The main reason they finally choose sclerotherapy is a complete lack of knowledge of the frequently encountered negative side effects and lack of information about alternative methods of treatment.

One of the most horrific stories I have ever heard, whilst attending a phlebological conference, was about sclerotherapy injections. The Sclerotherapist made a mistake and instead of injecting sclerosant into the vein, injected into the femoral artery, which is the main artery supplying blood to the legs. **The incident finished by leg amputation.**

Use of the Doppler examination (ultrasound) is a very valuable tool in the hands of an experienced Phlebologist in the management of venous disorders. The Doppler gives access to deeper veins and structures and in the hands of an inexperienced sclerotherapist could become a dangerous weapon. The artery could be injected instead of the vein with tragic consequences.

Injection of sclerosant in the artery is rather uncommon but an injection into or under the skin is quite common and causes quite unpleasant side effects such as pain, discoloration, brown staining along injected veins and brown or black spots where the Sclerotherapist missed the vein, lasting years or sometimes a lifetime.

Sclerotherapy is used all over the world. Does it work? Yes it does close the veins but not always. The injected veins in a large proportion of cases re-canalize (open again). In the case of re-canalization some Sclerotherapists, having no other tools at their disposal, proceeds to injecting the veins again and again with frequently unexpected disastrous results.

The surgical techniques are much superior because removed veins can not re-canalize.

In my practice, I am approached by a large proportion of patients who have been previously treated with sclerotherapy and are unhappy about the outcome.

After analyzing my database I have reached the following conclusion:

The worst complications and long term side effects are caused by sclerotherapy.

I tried to find an explanation for the phenomenon and my findings are as follows:

It is extraordinary that we worry so little about what is happening with the injected sclerosant. It is generally accepted that it just gets diluted and doesn't do any harm, but of course this is not the case. More and more reports are appearing about serious neurological complications such as temporary vision disturbances, confusion and severe migraine headaches.

Thrombotic complications such as superficial thrombophlebitis and subsequent skin pigmentation are common after sclerotherapy.

I have heard about an unfortunate case when after injection of sclerosant into the veins on the dorsum of the hand, the whole skin sloughed off.

On reviewing medical publications I found reports about the following serious complications after injections of sclerosant; pulmonary emboli, cardiac arrest, stroke and thrombosis of femoral vein.

What Happens to the Injected Sclerosant?

The sclerosant, after injection, especially the one in the form of foam, does not remain in place but travels further, progressively diluted but still very potent, creating havoc on its way. It gets to the bigger veins and then to the saphena magna and to the femoral vein through incompetent perforators, damaging delicate valves.

After many years or sometimes shortly after injection, the leg becomes swollen as a result of damage to the valves causing deep vein incompetence

There are a lot of women with “puffy” legs as a result of over zealous sclerotherapy injections.

When injecting sclerosant for spider veins the liquid cannot be contained to the desired area only, it travels further to small venules and capillaries, closing them unintentionally. That results in various degrees of ischemia, hence in turn the necessity to reconstruct the missing blood vessels. The phenomenon is very common. Any sclerosant, by the initial closure of veins and by its irritating chemical properties, can cause new growth of blood vessels called neoangiogenesis.

Sclerotherapy is sometimes used to treat recurrent veins after high ligation and stripping and this might result in complete disaster. After the saphena is removed the sclerosant can only travel directly to the deep veins including the femoral vein, rendering them incompetent.

One single injection of sclerosant can result in life long venous incompetence!

Your understanding of the possible complications related to treatments of varicose veins is essential in making the right decision.

Please make your own enquiries amongst other patients who underwent treatment with sclerotherapy. Ask them if they are happy especially after a few months or years. If you ask them to show you their legs you might witness that the number of varicosities have actually increased especially after repeated injections in the same area. The same happens after sclerotherapy injections for treatment of spider veins. As in the case of varicose veins they might partially disappear initially but after several months, in the majority of cases they come back with a vengeance in a typically uncoordinated way, in clusters and patches of telangiectasia for which there is no remedy. Further treatment with injections can only aggravate the existing unhappy situation.

It is worthwhile to explore all other available methods of treatment other than sclerotherapy injections and high ligation and stripping. Since early 1900s, when an American surgeon by the name of William Babcock invented the 'stripper' and described the stripping method, considerable advancement in the treatment of varicose veins has been achieved such as Ambulatory Phlebectomy. When surgical treatment cannot be contemplated modern compression garments appear to be an excellent and long lasting solution to venous problems.

There is a considerable psychological resistance amongst women in Australia to wear compression stockings. There is an entrenched belief that the compression stockings could be compared to those worn by our grandmothers, heavy, woolen, unyielding and causing increasing perspiration. This is of course no longer the case. Modern compression stockings not only improve circulation and hide any imperfections, but also are elegant and fashionable.

Conclusion

Conclusion. There is only a very limited place for sclerotherapy in modern Phlebological practice or maybe no place at all.

This article was written by Dr Marius Loeffler, Medical Director of Western Phlebology.