Varicose Veins come in all sizes and treatment can vary from laser for the tiniest spider veins to surgery for the biggest varicose veins. One of the most common methods of treating varicose veins is called sclerotherapy, or injection treatments. In this method, a needle is placed into the varicose veins and a solution (called the sclerosant) is injected. The sclerosant irritates the inside of the vein causing it to collapse and eliminate the varicose veins.

The treatment of venous disease with sclerotherapy is not new. In 1665, a doctor treated a patient with venous disease by injecting the veins with a solution of water and plant extracts. He had to use a chicken bone for a needle and a bird bladder for the syringe since it would be almost 200 years before the invention of the syringe and hypodermic needle. Following the introduction of the syringe and needle in the mid 1880’s, sclerotherapy became more widespread, but due to the toxicity of the sclerosant solutions it was eventually abandoned.

In the early 1900’s interest in sclerotherapy was rekindled. During the first two thirds of that century many of the sclerosants we use today were introduced. These included natural substances such as concentrated sugar and salt solutions. Chemicals were also used, such as sodium morrhuate, chromated glycerine, sodium tetradecyl sulphate, and polidocanol.

One problem doctors encounter when performing sclerotherapy is that after injecting the veins, the blood returns and either rinses away the sclerosant, or interacts with the sclerosant which leaves trapped clotted blood in the varicose veins. This trapped clotted blood is not dangerous since it can’t travel to other parts of the body, but can cause discomfort or leave pigments which are unsightly. It is for this reason that doctors wrap patients’ legs with elastic bandages or stockings following treatment. The compression helps prevent blood from entering the treated varicose veins.

Another limiting factor for sclerotherapy has been the amount of sclerosant that can be administered at one time to avoid toxic side effects. To help solve this, as well as the problem of being rinsed away noted in the last paragraph, “foam sclerotherapy” has gained recent popularity. By combining the sclerosant with air, the doctor can fill a much larger vein volume with a smaller amount of liquid sclerosant solution. This allows extending sclerotherapy from tiny spider veins to large ropey varicose veins. Additionally, the foam is less prone to being rinsed away by blood. Staying in the vein longer than liquid gives the sclerosant more time to interact and injure the vein lining. It also makes it less likely that blood will be trapped in the occluded vein, leading to a better result.

Besides the sclerosant solution, the other half of sclerotherapy equipment is the needle. Manufacturing has come a long way from the chicken bones of the 1600’s. Modern needle used for sclerotherapy are as small as 32 gauge (1/100th of an inch, or about 1/4th the size of a needle used to draw blood) so can enter the vein with little discomfort.

Although it has been performed for centuries, more recent developments have made significant improvements in sclerotherapy. Ask your doctor if it may be the right procedure for you.

Want to look and feel your best?

We offer several treatment options for the elimination of varicose veins. Call us today.

Calcagno & Rossi
Vein Treatment Center, LLC

2025 Technology Parkway, Suite 304, Mechanicsburg
717-791-2800 fax 717-791-2828
www.VeinsAreUs