

# Spider and Varicose Veins – The Bottom Line

In the United States hundreds of thousands of men and women are affected by spider and varicose veins. Initially, it was thought that the only treatment for varicose veins was a procedure called stripping. Stripping of the veins involved multiple stitches with a long recovery and downtime. In the past the only treatment for spider veins was injection of the veins (sclerotherapy) with saline solution. This was a painful treatment with multiple potential complications including brownish discoloration, failure to eradicate the veins, pain with injection, and even the potential for ulceration of the skin. The treatment for both spider and varicose veins has evolved to what is now considered the current state-of-the-art therapies. For varicose veins, the procedure of choice is laser or radio frequency closure and for spider veins, injection sclerotherapy with a foam solution is preferred.

Before beginning any treatment of spider or varicose veins it is absolutely mandatory that a detailed venous ultrasound be completed of the lower extremities. This ultrasound includes evaluation of the greater and lesser saphenous veins, all deep and communicating veins, as well as any ancillary veins. Any or all of these veins can be malfunctioning. The ultrasound, which takes about 30 minutes, should be performed by a Registered Vascular Technologist (RVT) who is certified and trained to perform ultrasonic examinations. The veins are evaluated to check for something called reflux. This essentially looks to see if valves in the veins are leaking. The basic principal with varicose veins is that blood normally flows from the feet to the heart through two mechanisms. One: the contraction of the muscles in the legs working to squeeze blood through the veins pushing it towards the heart. Two: the valves in these veins open and close so as to push the blood from the feet to the heart. If the valves do not close properly the blood goes backward through the valves, leaks around



the valves, and is then pushed superficially through the skin forming varicose and spider veins. Therefore, unless a detailed ultrasound is done, the exact location of the refluxing (incompetent valves) will not be known. This is important when considering both spider vein and varicose vein treatments.

In addition to looking at these valves in the superficial veins, a detailed evaluation is also completed of the deep veins in the leg to look for clots or obstructions as well as the connecting (perforating) veins. The perforating veins connect the superficial system to the deep system of veins. Realistically, there could be problems with any of the three layers of veins. Once the detailed ultrasonic evaluation is completed it should be interpreted by a physician who is adequately trained and certified to evaluate the ultrasound. This should be performed by a physician who is certified as a registered vascular technician or certified as an RPVI (Registered Physician in Vascular Interpretation).

Following a thorough ultrasonic evaluation decisions can be made as how to best treat the spider and varicose veins. If the patient simply has spider veins and there is no reflux, the problem veins can be treated using injection sclerotherapy alone with a high success rate. Injection sclerotherapy involves the injection of a solution into the spider vein to close or seal the tiny vessels. There are several solutions that are commonly used to inject veins. One is a foam solution, which is a mixture of liquid with air and which sort of looks like a shaving cream. The foam is injected into the spider veins to help eradicate them. A second solution, called glycerin, is slightly stronger than the foam and is primarily used for very tiny spider veins. It is important to note that one sclerotherapy treatment usually will not eradicate all spider veins. As a general rule of thumb, about a third of veins will be eradicated immediately, a third will require a second or third treatment, and the final third may require multiple treatments. In general, approximately 90% of most spider veins can be eliminated with sclerotherapy. However, depending on how many spider veins a patient has, multiple treatment sessions may be necessary. Please note that although spider veins are treated by many people including dermatologists, plastic surgeons, podiatrists and even cardiologists, nurses and P.A.'s, the most qualified person to treat these veins is a vascular surgeon.

For varicose veins current state-of-the-art treatment is a closure technique which can be performed using either a radio frequency (VNUS) or a laser. Both of these function in a very similar manner. The end result is that the treated vein is closed by inserting a laser filament or radio frequency catheter into the vein. The catheter is heated, causing the vein to seal. In effect, think of this as a process that seals the leak in the vein. This entire procedure is usually completed in the office setting with either a minimum sedation or no sedation at all and with tumescent anesthesia. This kind of anesthesia is very diluted and injected along the course of the vein serving two functions: to buffer the laser or radio frequency from the skin so as to not burn the skin and to bathe the vein in an anesthetic solution that shrinks the size of the vein and providing long lasting anesthesia after the procedure. The closure treatment is completed on an outpatient basis and in most instances the patient is back to work the next day. Following the closure procedure the patient will need to wear compression stockings for a variable amount of time, usually at least two weeks. The closure treatment is performed by many kinds of physicians including plastic surgeons, cardiologists, radiologists, and vascular surgeons. However, the physician with the most expertise in the treatment of varicose veins is a vascular surgeon.

The treatment of spider and varicose veins goes hand in hand with an extensive ultrasonic evaluation by a Registered Vascular Technician (RVT) and interpretation of the ultrasound by a physician certified to interpret it. Dr. John P. Landi has performed over 7,000 laser vein closure procedures and is not only board certified in General Surgery but is also a Vascular Fellowship trained Vascular Surgeon. He is one of only 250 physicians throughout the world certified by the American Board of Phlebology (the treatment of veins). He is also a Registered Physician in Vascular Interpretation (RPVT) and certified by the American Registry for Diagnostic Medical Sonography to interpret vascular ultrasounds. Dr. Landi is the Medical Director of Vanish Vein and Laser Center located on 10th St North in Naples. He is also Medical Director of La Bella Mia Medical Spa.

*Wouldn't you rather have your vein care in the hands of a Vascular Surgeon?*