

# Glossary

Varicose Veins are veins that have enlarged and have become tortuous. The term usually refers to veins in the legs. Healthy leg veins have one-way valves that promote the return of blood ( against gravity ) back to the heart. When the valve leaflets do not meet properly and they " leak " blood back down the leg, the vein wall stretch, become enlarged and tortuous. This backward flow of blood in the leg is called Venous Reflux.

Spider Veins or telangiectasias are tiny dilated blood vessels near the surface of the skin measuring between 0.1 mm and 1.0 mm in diameter. They often occur on the legs commonly on the upper thighs and near the knee and ankle. Besides cosmetic concerns many spider veins are painful, especially during menses. Treatment involves injecting a sclerosing agent into the blood vessel with a tiny needle.

Reticular Veins also known as " feeder veins " are dilated blue veins beneath the skin surface in the subcutaneous tissue. They are enlarged due to the increased pressure that they receive from deeper veins in the leg. They measure 2.0mm to 3.0mm in general and are too small to call varicose veins. They often give rise to spider veins and usually are considered a cosmetic concern.

Corona Phlebectasia is a cluster of small spider veins usually on the inside ankle extending onto the top of the foot. It is a sign of advanced vein valvular disease in the saphenous veins of the leg ( main surface vein ). Troublesome bleeding can occur from these dilated capillaries.

Lipodermatosclerosis literally means scarring of the skin and fat. The term is generally reserved to describe skin changes in the lower leg above and including the ankle. It implies long standing venous disease and increased pressure in the lower leg venous system ( Chronic venous Insufficiency ). As the condition progresses over time, iron deposits from the red blood cells which have escaped through the dilated vein walls, becomes deposited into the soft tissue under the skin. This results in an intense inflammation ( not infection ) and causes the skin to become leathery, hard and turn brown from the iron. Patients with this condition are at high risk of developing a venous ulcer at the ankle.

Duplex Ultrasonography is a form of medical ultrasound that incorporates two elements: gray scale ultrasound to visualize anatomic structures such as leg veins and color-doppler ultrasound which visualizes the flow direction of blood within a blood vessel. This examination is very useful to a vein specialist to help make a diagnosis of clots within a vein or reflux in a vein. It is also used during procedures to guide a catheter into an abnormal vein to be treated.

VNUS Closure procedure is a minimally invasive, small caliber ( 2mm ) thermal catheter which is designed to be inserted into abnormal refluxing veins of the leg and cauterize or collapse them ( thermal ablation ). Local anesthesia is infused along the course of the vein to prevent pain. The procedure was developed in 2000 and hundreds of thousands of procedures have been performed world wide since. The procedure takes approximately 45 to 60 minutes to perform and requires very little recovery or loss from work. 95 to 98 per cent of veins treated remain closed in five years. The procedure revolutionized the treatment of venous disorders of the leg. Compression hose is necessary for one week following the procedure.

Sclerotherapy is a technique reserved to treat the tiniest of surface veins ( spider veins ) or larger veins utilizing ultrasound guidance in lieu of catheter ablation or surgical removal. A sclerosing agent is injected into the vein to destroy the lining of the vessel and consequently collapse it. The treatments may be strictly cosmetic or they may be medically indicated and therapeutic. Several sessions are often necessary if the procedure is for cosmetic purposes only. This treatment technique is often referred to as "saline injections". However, saline injections today are much less popular than previously used. Other safer agents are available today. Pain during the 30 minute procedure is limited to a tiny pin prick. Compression hose is necessary for one week following the procedure.

Ambulatory Phlebectomy is a minimally invasive surgical technique to remove medium sized varicose veins. Usually these veins are too tortuous to be removed by a catheter technique. This procedure is often performed after a successful catheter ablation of the refluxing saphenous vein. The varicose veins are removed via small needle punctures using only local anesthesia in the physician's office. There is very little recovery time and no loss from work.

Unna Boot is not a boot at all but a compression bandage impregnated with zinc oxide, calamine lotion, and glycerin. These bandages are used to treat leg edema and chronic ulcerations often caused by venous diseases.

DVT or Deep Vein Thrombosis implies that a blood clot or thrombus has developed in the deep venous system of the leg ( also can occur in the upper extremities ). The clot can form in the leg anywhere from the ankle to the groin and above into the pelvic veins. This may occur spontaneously in people who have a genetic clotting factor disorder called thrombophilia, or after surgical procedures, trauma, prolonged bed rest and pregnancy. The danger of a blood clot in the deep venous system is that the clot may break loose and migrate centrally into the lungs ( called a pulmonary embolus ) causing extreme shortness of breath, chest pain, shock and even death if not treated promptly. In addition, gradually over time the important unidirectional valves in the deep veins may become damaged and subsequently become incompetent. This leads to venous "overload" in the lower leg ( called chronic venous insufficiency ) which may result in troublesome symptoms such as aching, heavy, painful legs. Over time skin ulcers may develop near the ankle. This is called post thrombotic syndrome.

Post Thrombotic Syndrome is an unfortunate sequel to a deep vein blood clot (Thrombosis). Approximately 50% of people who obtain a DVT will develop some degree of post thrombotic syndrome over time which may take months to years. This scenario is poorly understood by many physicians and unfortunately the appropriate care is delayed at best or not recommended at all. All patients who develop a DVT of the major deep veins of the leg should be placed in compression hose, encouraged to ambulate ( previously the best treatment was thought to be bed rest ) and be given anticoagulation. The post thrombotic syndrome develops because of increased venous pressure in the lower leg as a result of either deep venous obstruction ( blockage ) or valvular dysfunction resulting from damage caused by the blood clot. Symptoms of PTS include leg pain, swelling, skin discoloration and hardening, and ankle ulcer formation. (usually inside of the ankle)

Superficial Thrombophlebitis ( STP ) is an inflammation NOT an infection of a superficial vein primarily in an extremity or the chest ( Mondor's Disease ). It presents as a painful induration with erythema ( red streak ) in a linear or branching configuration forming palpable cords under the skin. It is generally caused by a blood clot in a superficial vein in the skin. It should not be treated with antibiotics but by anti-inflammatory medications ( NSAID ), heat and elevation if possible. While this condition is usually painful, it is not dangerous and will not "travel" to the heart or lungs.

