



## Varicose Veins

Varicose veins are “dilated, tortuous” veins, by definition. The term is applied to the superficial veins of the leg.

The venous drainage of the leg has deep and superficial systems. The deep system (near the bone and between the muscles) is the main venous drainage of the leg. The superficial veins are a “back up” system, in the fat, under the skin. The superficial veins are known as the Long and Short Saphenous veins, and these join the deep system at the sapheno-femoral and sapheno-popliteal junctions respectively, in the groin and behind the knee. Communicating veins exist between the deep and superficial system. Both systems have numerous valves within the veins to direct drainage of the blood towards the heart and to prevent “pooling” in the leg.

The patho-physiology associated with the venous systems has been fully defined only in the last twenty-five years.

The pathologies of both venous systems include occlusion (thrombosis) and valve incompetence. These two pathologies, in either venous systems, lead to a degree of high blood pressure (venous hypertension) in the systems. Longstanding venous hypertension in either of these systems can lead to skin and soft tissue damage of the lower leg, sclerema and possible necrosis, (leg ulceration). This is also known as the postphlebotic limb syndrome. This is a difficult condition to treat and leads to significant patient morbidity.

Varicose veins (VVS), may be primary or secondary. Primary VVS are congenital and hereditary and progress with age, and are due to valve incompetence in the veins. Secondary VVS occur due to underlying disease involving the deep venous system. Surgical removal of VV in the presence of underlying, deep, venous pathology may aggravate the clinical condition: precipitate a post-phlebotic limb syndrome, lead to recurrent varicose veins, and entrapment of blood in the leg (venous claudication). Hence, any contemplated surgery on VVS, requires an ultrasound assessment (Duplex Doppler) of the deep venous system to ensure its patency and valve competence.

The indications for VV surgery include pain, cosmetic aspects, evidence of venous hypertension, and finally, personal choice. There is nearly always the option of “non intervention”, with the possible use of graduated, compression, venous stockings. The surgery involves careful, pre-operative “marking” of the veins, which may then be either ligated or excised through tiny “puncture wounds”, to provide the best possible cosmetic outcome. A 2-3cm groin incision, hidden in the lines of Langer is usually required. An overnight stay in hospital is usual. Post-operative bruising is normal. Normal activities are resumed within a few days with the exception of major, physical exercise.