

❖ Ultrasound Guided Injection Sclerotherapy

-Very effective in the local treatment of residual varicose veins and perforator veins. Under ultrasound guidance, using a very fine needle, a sclerosant is injected into the vein. The vein wall comes in direct contact with the solution, resulting in inflammation, healing, fibrosis and subsequent vein closure.



Compression Stockings: These may relieve the swelling and aching of your legs but do not prevent more varicose veins from developing. They need to be worn during the day and are taken off at night. Graduated compression stockings are tightest at the ankle and get gradually looser further up the leg. They help the blood to flow up towards the heart and not reflux into the legs.

Varicose Vein Surgery: This involves removing the varicose veins. There are many variations of operation, depending on which veins need treatment. The most common is called Ligation & Stripping. It involves multiple incisions, anaesthesia, and has inferior outcomes as compared to EVLT.

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Patient Information Leaflet by

ASIA PACIFIC VASCULAR SOCIETY



 **healthy veins** 

Comprehensive vein care & treatment options for Varicose Veins

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- ABOUT VARICOSE VEINS -

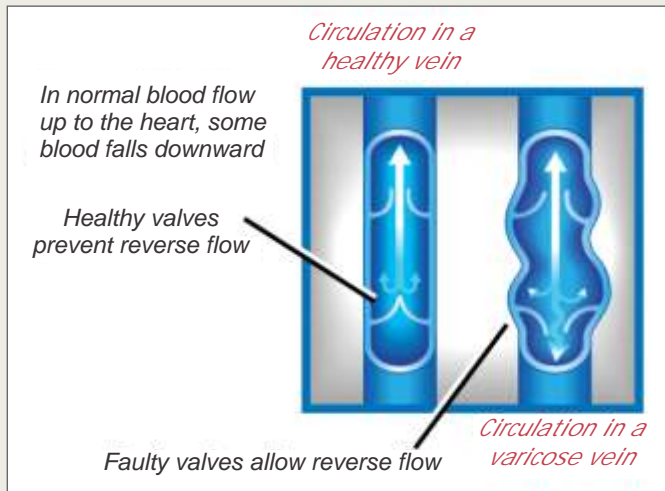


VARICOSE VEINS

❖ What are varicose veins?

There are two sets of veins in the legs: Deep Veins and Superficial Veins.

Veins have valves which allow the blood to flow against gravity towards the heart. When these valves weaken & don't function properly, they cause reflux and pooling of the blood into the leg veins because of gravity (especially on standing or sitting). These enlarged, swollen veins are known as Varicose Veins.



The problems related to varicose veins are:

- leg pain, heaviness, fatigue, cramps or leg swelling (especially after standing / walking and in the evening)
- discolouration of skin (blackening, thickening, dryness, loss of hairs)
- Ulcers in leg
- Bleeding

❖ Causes:

- Jobs involving long periods of standing and sedentary lifestyle.
- Pregnancy causes increase in hormone levels and blood volume, which in turn causes veins to enlarge.
- Obesity
- Ageing (due to loss of vein elasticity).
- Heredity is an important contributing factor.

❖ Prevention:

- Avoid standing still for long periods of time.
- Exercise regularly, such as walking.
- Maintain a healthy weight.
- Wear properly fitted compression stockings to prevent further deterioration of existing varicose veins.



Varicose Veins



Spider Naevi



Lipodermatosclerosis with venous ulcer

ENDOVENOUS LASER TREATMENT (EVLT)

❖ What is EVLT?

Endovenous laser treatment is a minimally invasive technique. It is done under local anaesthesia and doesn't require general anaesthesia or cut. A



thin fiber is inserted into the vein percutaneously. Laser energy is delivered to the targeted veins, which absorb the laser, causing the vein to close and seal shut.

❖ Why EVLT?

- ✓ Outpatient procedure
- ✓ Quick and easy to perform
- ✓ Minimally invasive and less traumatic
- ✓ No scarring
- ✓ Excellent clinical and aesthetic results
- ✓ Better result than surgery
- ✓ Reduced procedure costs

❖ Is there any follow-up to the procedure?

Within the subsequent few weeks the patients usually have their legs re-examined. Patients have to wear elastic compression stockings for 6 to 8 weeks to allow the vein to heal.

❖ How quickly can I return to normal activities?

You can return to normal activities immediately after the procedure, including walking, driving, etc.

Endovenous Radio Frequency (RF) Ablation

is an alternative treatment which involves insertion of a catheter into the target vein and passage of RF energy to the vein tissue. In recent years, EVLT has surpassed radiofrequency vein ablation due to the improved outcomes. Conceptually, it is similar to EVLT but here the delivered energy is RF energy instead of Laser.