



SNS COLLEGE OF ALLIED HEALTH SCIENCES
SNS Kalvi Nagar, Coimbatore - 35
Affiliated to Dr MGR Medical University, Chennai



DEPARTMENT: ALLIED HEALTH SCIENCES
COURSE NAME: SURGERY

Topic: Varicose Vein



CASE SCENARIO



- A 57 year old female presented with a complaints of bluish discoloration twisted veins on the both lower limb and How will you diagnose this patient?



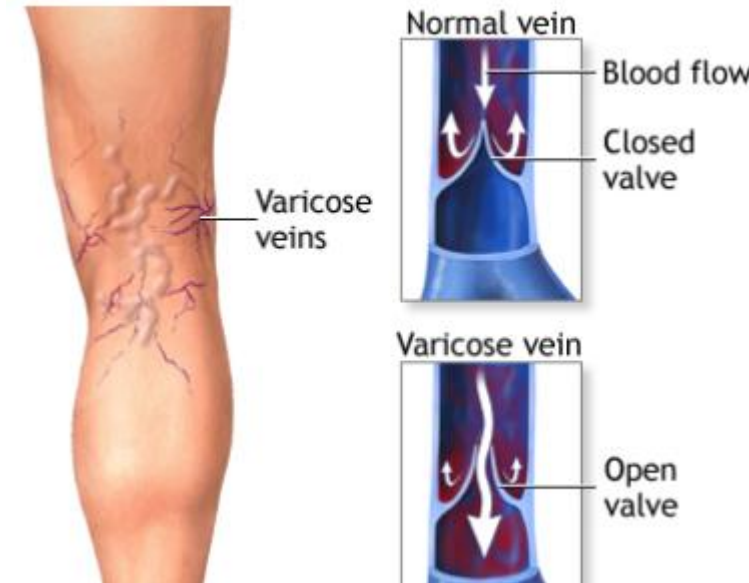
Introduction



Definition-Varicose veins, or varicosities, in which superficial veins are swollen, twisted . They usually occur in the legs. Sometimes varicose veins form in other parts of the body. Hemorrhoids , for example, are a type of varicose vein that develops in the rectum.

Incidence

Varicose veins are a common disorder that affects around 23% percent of adults in the United States, of which women are nearly twice as likely as men to develop them.



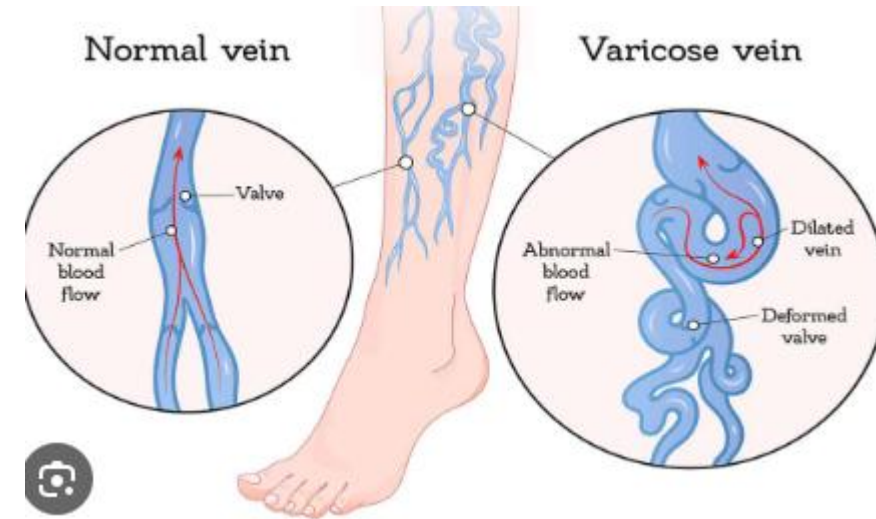
Etiology & Risk factors

Causes

Congenital or Acquired

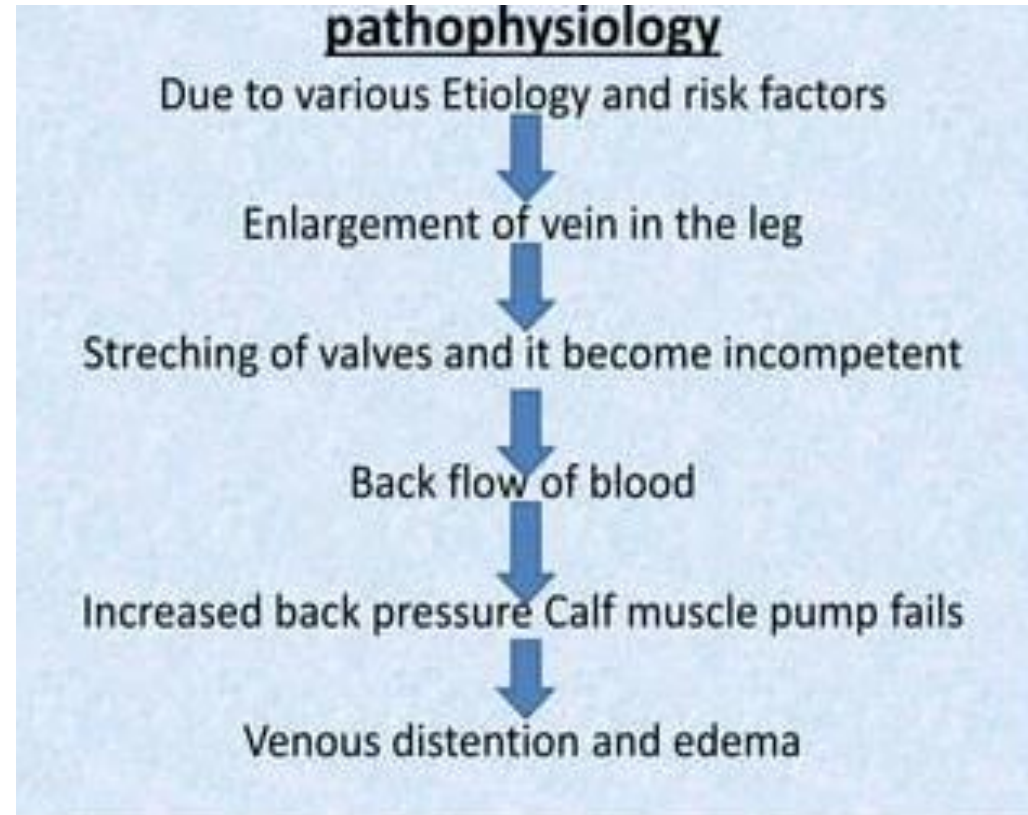
Vein walls and valves can become weak for several reasons, including:

- Hormones.
- The aging process.
- Excess weight.
- Restrictive clothing.
- Pressure inside the vein from standing for long periods.





Pathophysiology





Complication



- **Varicose eczema** - results in red, scaly and flaky skin in the affected area. Some blisters and crust on the skin may also form.
- **Lipodermatosclerosis** - is a more serious complication that leads to hardened and tight skin, which may change colour to red or brown. This usually occurs in the calf area of the legs and is often non-reversible.
- **Venous Insufficiency**

If the blood flow remains disrupted for an extended period of time, it can affect the oxygen exchange and processing of nutrients and waste products, which is a condition known as chronic venous insufficiency. This then places the individual at a higher risk of other complications.

- **Phlebitis**

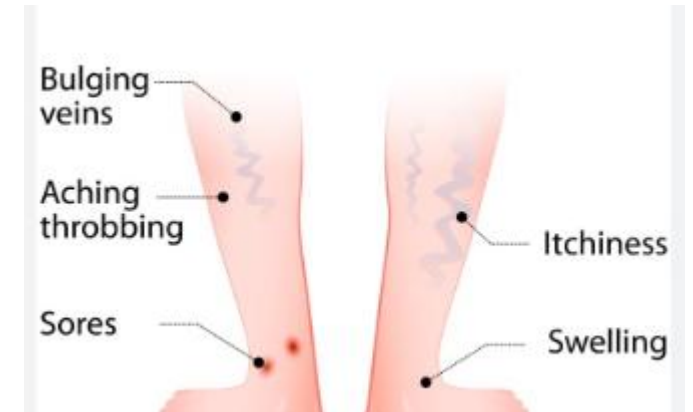
Phlebitis, also known as thrombophlebitis, refers to inflammation of the veins that may be accompanied by the formation of hard and tender clots. This is a distinct condition from deep vein thrombosis, however, and is markedly less severe and may not always require treatment. This commonly results in symptoms of swollen, painful, reddened and heated skin due to the inflammation in the area.

- **Bleeding**
- **DVT**



- Blood clots
- Skin ulcers
- Bleeding
- Twisted veins
- Aching
- Itching
- Burning
- Restless sensation of legs
- Thrombing pain
- Cramping

Clinical manifestation

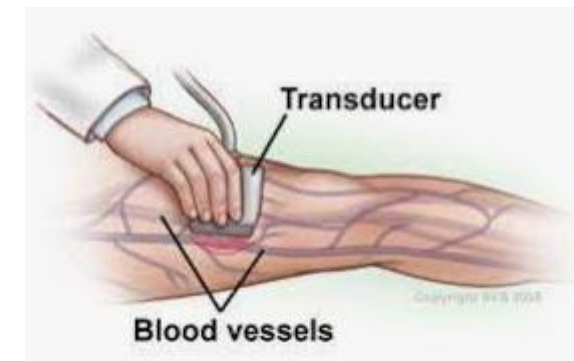




Diagnosis



- History collection
- Physical examination
- **Duplex ultrasound scan** - This is a type of scan that uses high-frequency sound waves to produce a picture of the veins in the legs. The picture shows the blood flow and helps the vascular specialist locate any damaged valves that might be causing your varicose veins.



Treatment

- **Elevation:** To increase blood flow and decrease pressure in the veins.
- **Elastic stockings:** Supportive stockings or socks compress the veins and reduce discomfort. The compression stops the veins from stretching and helps blood flow.
- **Injection therapy (sclerotherapy)** Sclerotherapy is a procedure used to treat blood vessel malformations and also malformations of the lymphatic system. A medicine is injected into the vessels, which makes them shrink. It is used for children and young adults with vascular or lymphatic malformations.

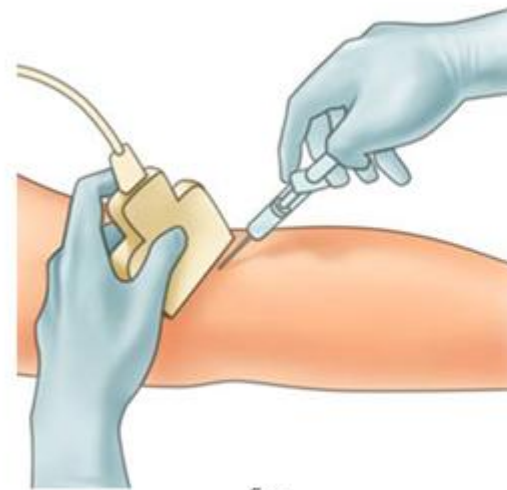


fig.1

FIG 1:
Utilizing ultra sound technology, the varicose vein is located to allow for precision injection of the sclerosant agent.

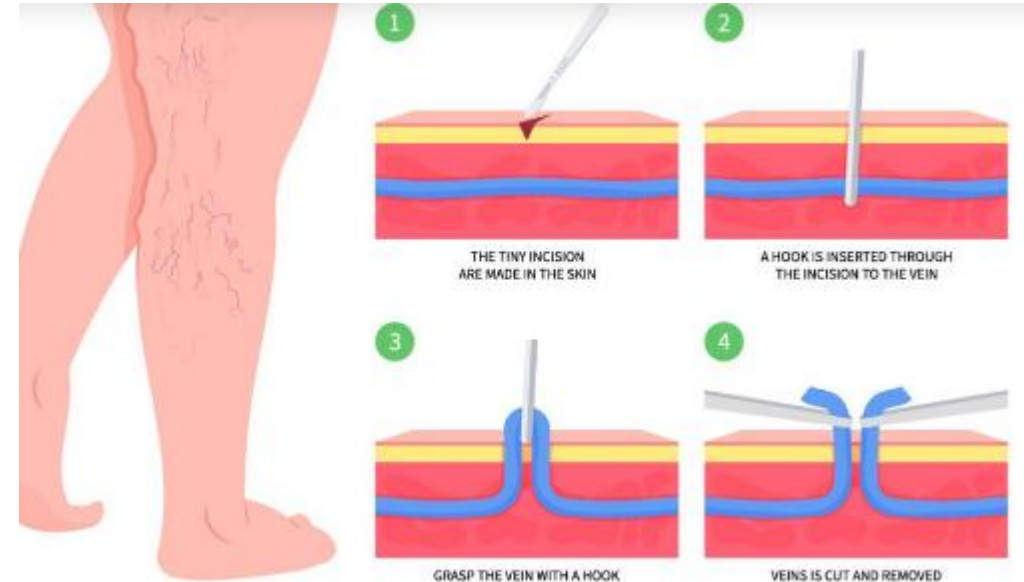


fig.2

FIG 2:
Once the sclerosant agent is injected into the vein, it causes the varicose vein to collapse.

Ambulatory phlebectomy

- An ambulatory phlebectomy is performed to remove superficial or troublesome varicose veins near the surface of the skin. By making small incisions on the skin, the veins can be easily removed, without even needing stitches. An ambulatory phlebectomy is usually only one part of treating varicose veins.



Laser treatment

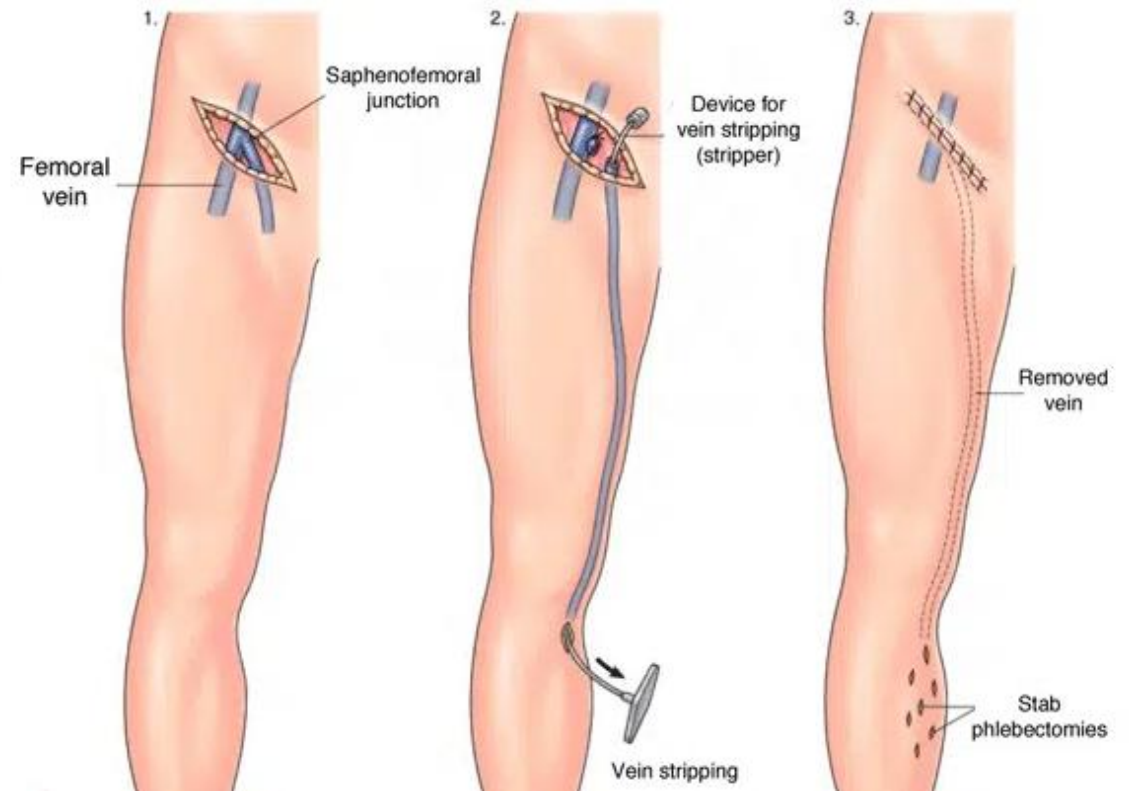
- **Laser therapy:** In a minimally invasive procedure called endovenous thermal ablation, use a catheter (a long, thin tube) and laser to close off a damaged vein.



Surgical management

Classic surgery / Stripping

- Vein stripping is a surgical procedure done under general or local anaesthetic to aid in the treatment of varicose veins and other manifestations of chronic venous disease. The vein "stripped" is usually the great saphenous vein.





Complications of the treatment



- Scarring.
- Skin burns.
- Infection.
- Injury to a nerve.
- Deep vein thrombosis

Sclerotherapy can cause side effects that include:

- Redness or bruising for a few days where a needle went into the skin.
- Brown areas (for several months) on skin where the needle touched.
- Lumps or hardness for a few months.



Assessment 1



1. Other name of Varicose vein
2. What Sclerotherapy?
3. Complications of treatment

GROUP DISCUSSION
About varicose vein



Reference



- The Text Book of Pathology author Nithin chawla
- For further reference –
- <https://youtu.be/XN7Z9ibBagY?si=5DtIYaXAMb-WDdNr>