Venous Varicosity

CEAP classification:

- **C** linical
- **E** tiological
- **A** natomical
- **P** athological

Clinical signs grade

None	0
Telangiectasia	1
Trunkal varicosity	2
Swelling	3
Lipodermatosclerosis	4
Healed ulceration	5
Chronic venous ulcer	6

Etiological Classification

- **PRIMARY**
  - Familial (absent ilial valves)
  - Incompetent valves at
    - The saphenofemoral junction
    - Saphenopopliteal junction
    - Perforating veins
    - Deep veins
- **SECONDARY**
  - I.e following a **DVT**

Anatomical Classification

- **Superficial veins**
  - Greater saphenous
  - Lesser saphenous
  - Perforating veins...
    - In the thigh: connect to greater saphenous
    - In the calf: Connect to lesser saphenous
- **Deep veins**
  - Iliac
  - Femoral
  - Popliteal
  - Calf veins

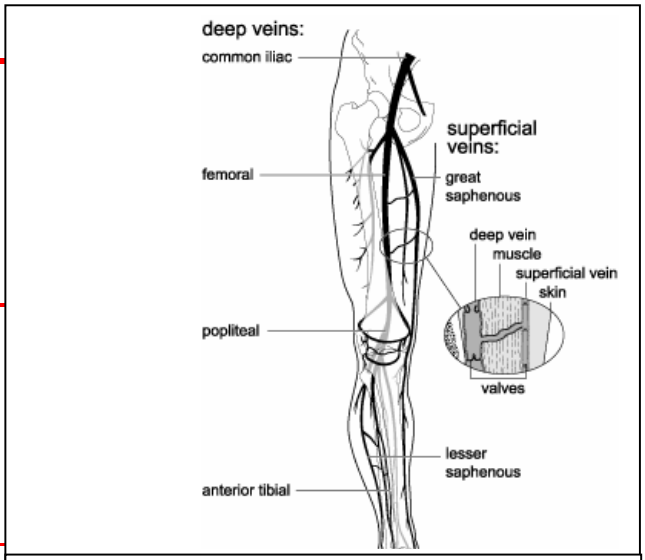
Pathological classification

Reflux or obstruction or BOTH reflux AND obstruction

...Basically, blood is meant to pass into the deep system from the superficial system via the perforating veins. The deep vein network then uses the muscle pump to return the blood to the heart. If the perforating valves become incompetent, the blood pools in the superficial system and dilates those veins. Hemosiderin skin staining and oedema may result, as well as itching, eczema, cramps, and painful phlebitis.

Examination

Look for poor skin nutrition, eg. ulcers + thin skin
Look for thrombus (hard veins, cord-like structures)
Look for phlebitis (red, painful veins)



*The **TESTS** your supervisor will want you to know:*

Trendelenburg:
Lie the down, raise the leg, wait until veins drain, occlude the saphenofemoral junction and now get the patient to stand up while stil occluding. If the saphenous vein fills again, the deep veins are incompetent.

Perthe's:
Torniquet the patients leg and walk until the superficial veins collapse. If they do, the deep veins are patent and the perforating veins are competent. If the veins are unchanged, the perforating veins are incompetent. If they fill MORE than before torniqueting, the deep veins may be thrombosed and occluded.

It is also possible to tap the top of a vein and feel for the transmitted impulse downsteam (if should get stopped by competent valves if they are present)

INVESTIGATIONS:

Duplex Ultrasound:
-poor quality below the knee
Photoplethysmography
Lymphoscinigraphy if it might not be a venous issue

MANAGEMENT:

- Regular walking
- Weight reduction
- Avoid prolonged standing / sitting
- Frequent leg elevation
- Compression Stockings

SCLEROTHERAPY

Obstruct the vein with tourniquet and inject a bolus of hypertonic saline, ethanolamine or sodium tetradecyl sulfate- the idea is to kill off enough of the venous epithelium, so that the incompetent vein scars over forever.

SURGERY

Eg. ligation and stripping is for severe disease only.