#### Description

A varicose (Latin: varix = twisted) vein is usually tortuous and dilated. Incompetant values  $\rightarrow$  dilated and tortuous superficial veins usually of legs.

# Epidemiology

• Very common. Prevalence 15-30% in adults >35. F>M

# **Risk Factors**

- Familial history
- ≥2 pregnancies or obesity in women
- Increasing age

#### Presentation

*History:* May be asymptomatic. Commonly itching, leg aches & heaviness, night cramps, oedema, burning sensations, parasthesiae, exercise intolerance, or restless legs. Lengthy standing. *Exam:* Check CVS & abdo exams for DDx. ?Changes of chronic venous insufficiency. Varicosities of short saphenous vein normally seen below knee posterolaterally. Long saphenous vein varicosities may run whole length of leg, and more medial. Test for venous incompetency:

- <u>Chevrier Sign</u>: Find SFJ 2-4cm below inguinal lig medial to femoral artery & tap varicosity in standing patient. Positive if fluid thrill (=incompetency).
- Brodie-Trendelenburg tourniquet test: Supine patient elevates leg emptying veins. Apply tourniquet to thigh just below SFJ. Stand patient & if incompetent perforators, the vein will fill from below. If SFJ incompetent, they will fill from above on removing tourniquet. Repeat at different levels to find incompetent valve.
- Perthes' manoeuvre: Apply tourniquet at SFJ to occlude the superficial veins only, and then patient stands repeatedly on tip-toe. If deep veins are obstructed, the dilated veins increase in prominence otherwise they will empty as normal.

# Differential diagnosis

• Cellulitis, Superficial phlebitis, DVT, Osler-Weber-Rendu Syndrome

# Investigations

Imaging: Hand-held or formal duplex Doppler USS

# Management

Haemorrhage control: if bleeding: pressure & elevation.

*Lifestyle changes:* weight loss and exercise - not much evidence of efficacy.

Compression stockings: widely used. Again evidence is not extensive.

*Surgical treatment:* avulsion, stripping, injection sclerotherapy, powered phlebectomy, radiofrequency ablation, endovenous laser therapy.

# Complications

- Haemorrhage
- Thrombophlebitis
- Venous insufficiency (ulcers, oedema, skin pigmentation, varicose eczema, atrophie blanche, lipodermatosclerosis)

#### Prognosis

- Untreated, varicose veins tend to become larger over time, and *îvenous* insufficiency.
- Frequent recurrence (70% over 10y).

# Varicose Veins