

Peripheral artery disease (PAD) is most commonly due to atherosclerosis, where an atherosclerotic plaque causes arterial stenosis or occlusion. This results in a reduction in blood flow to the affected limb. Most patients are asymptomatic but many experience intermittent claudication (pain on walking). Critical limb ischaemia occurs when the reduction in blood flow is so severe that it causes rest pain or tissue loss (ulceration/gangrene)

Claudication

Aching or burning in leg muscles

Reliably reproduced at a set distance of walking

Relieved within minutes on rest

Never present at rest

Not exacerbated by position

Site of stenosis or occlusion

Aorta
Common iliac artery
Common femoral artery
Superficial femoral artery

Site of pain

Buttock

Thigh

Calf

Bilateral buttock, thigh and calf claudication

The site of pain provides an indication of the site of disease

Critical limb ischaemia

1 or more of:

Ulceration

Gangrene

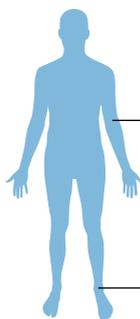
Rest pain in foot for more than 2 weeks

May be resistant to opiate analgesia

Difficult to distinguish from neuropathy

Patients frequently hang their leg out of bed to try to relieve their pain

Ankle-brachial pressure index (ABPI)



ABPI of 0.9 or less is diagnostic of PAD

ABPI of 0.5 or less suggests critical limb ischaemia

ABPI is the ratio of blood pressure at the ankle to blood pressure at the arm



Incompressible (ABPI >1.2) and falsely elevated values are seen in patients with arterial calcification, notably people with diabetes and/or chronic kidney disease

Ulceration or wound

+

PAD
Irrespective of ABPI

→

Critical limb ischaemia
Urgent referral

Acute limb-threatening ischaemia

Rare but important not to miss

Classically presents with sudden onset symptoms

Also indicated by sudden deterioration of claudication

One or more of the '6 Ps':

P Pain at rest

P Paraesthesia

P Pallor

P Paralysis

P Pulseless

P 'Perishingly' cold

