

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

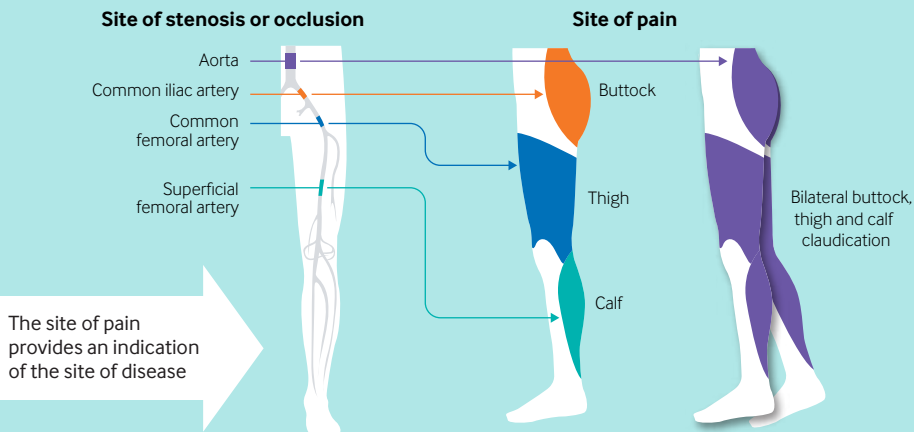
Aching or burning in leg muscles

Reliably reproduced at a set distance of walking

Relieved within minutes on rest

Never present at rest

Not exacerbated by position



## Critical limb ischaemia

1 or more of:

Ulceration

Gangrene

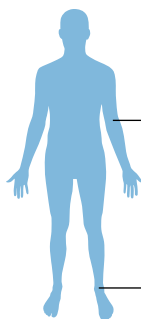
Rest pain in foot for more than 2 weeks

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

