**Peripheral Vascular Disease in Vascular Surgery**

**Definition of intermittent claudication:** REPRODUCABLE LOWER LIMB PAIN

<table>
<thead>
<tr>
<th>ANKLE-BRACHIAL INDEX:</th>
<th>PRODUCED BY EXERCISE RELIEVED BY REST</th>
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<tbody>
<tr>
<td>AN ASSESSMENT TOOL OF SEVERITY</td>
<td>PAIN AT REST IS A MARKER OF SEVERITY</td>
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<tr>
<td>Ratio of ankle systolic blood pressure to brachial systolic blood pressure (leg BP over arm BP)</td>
<td>ULCERATION AND GANGRENE ARE MARKERS OF SEVERITY</td>
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<tr>
<td>SHOULD BE ~ 1</td>
<td></td>
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<tr>
<td>claudicators have ~ 0.5</td>
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<tr>
<td>rest pain occurs at ~ 0.3</td>
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**Is this limb acutely ischaemic?** - use the 6 P method

- Pulseless
- Painful
- Pale
- Paralysed
- Paraesthesia
- Perishingly cold

Compare the limbs
Feel the pulse: equal absent?
Are they in AF?
Think: why would there be an acute arterial embolic event?

Investigate with:
- Duplex Doppler: to visualise flow and structure of arterial walls
- Angiogram if doppler is too inaccurate (eg. below the knee)
- CT or MRI digital subtraction angiogram (3D reconstruction)

**Management** is largely medical

- Eg. ACE inhibitor, statin and 100mg Aspirin
- FOOT EDUCATION: watch for ulcers
- QUIT SMOKING
- WALK ~ 1 hour per day (to increase diameter of collateral arteries)
  Most improvement happens in first 6-9 months

**Surgical Management**

- BALLOON ANGIOPLASTY
- STENT ANGIOPLASTY
- ENDARTERECTOMY

**Ankle-Brachial Index:**

\[
\text{Ratio of ankle systolic blood pressure to brachial systolic blood pressure} = \frac{\text{leg BP}}{\text{arm BP}}
\]

Most importantly risk factors:
- For coronary disease: DYSLIPIDAEMIA
- For cerebrovascular disease: HYPERTENSION
- For peripheral vascular disease = !! SMOKING !!