Diabetic Foot / Foot Ulcer Examination

Introduction
- Wash hands, Introduce self, ask Patients name & DOB & what they like to be called, Explain examination and get consent
- Expose feet

Inspection
- General: gait, shoes (flat heel, pattern of wear)
- Skin: vascular insufficiency (hair, pallor), rubor/corns/callaous at pressure points, texture, fissures, skin breaks/lesions/ulcers, diabetic dermopathy, infection (swelling, erythema, gangrene, cellulitis), oedema, venous eczema/lipodermatosclerosis
- Nails: dystrophic, ingrown
- Webspaces: cracked, infected, ulcers, maceration
- Deformity: claw toes, bony prominence, Charcot’s joints (joint swelling, collapse of medial longitudinal arch – due to “loss protective pain sensation”)

Describe any ulcer: size and site, characteristics (shape, edge, colour), secondary features.

Palpation (ARTERIOPATHY)
- Temperature: use dorsum of each hand to feel up legs
- Pulses: femoral, popliteal, pos tibial, dorsalis pedis
- Capillary refill

Palpation (NEUROPATHY)
- Sensory: show patient how each feels on sternum before and get them to close their eyes
  - Monofilament - use monofilament fully out and use enough force to make it bend. Touch foot in multiple places.
  - 128Hz Tuning fork - use fingers to twang end with prongs and hold circular base on the patient’s joint. Start over big toe joint first and move proximally if patient can’t feel it. Ask patient to tell you when they feel a vibration, and ask them to say when it stops (manually stop it)
  - Proprioception - hold distal phalanx of big toe with a finger each side (while stabilising proximal phalanx with other hand). Ask the patient to look and show them the up and down positions. Now, ask them to close their eyes and wiggle up and down a few times, then stop and ask patient if it’s up or down. If no proprioception, move to proximal joints until they can.
- Motor: muscle wasting, pes planus, pes cavus, Charcot joints
- Reflexes: ankle jerk
- Autonomic: sweaty, dry cracked skin

To Complete exam
- Thank patient and cover them
- “To complete my exam, I would examine do a full neurovascular examination and educate the patient”
- Summarise and suggest further investigations you would do after a full history
  - ABPI
  - Doppler arterial pulses
  - Blood glucose
  - HbA1C

<table>
<thead>
<tr>
<th>Site</th>
<th>Venous</th>
<th>Ischaemic</th>
<th>Neuropathic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaiter region</td>
<td>Soles/ pressure areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superficial</td>
<td>Deep</td>
<td></td>
<td></td>
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<tr>
<td>Sloping</td>
<td>Punched out</td>
<td></td>
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<tr>
<td>Granulating</td>
<td>Sloughy &amp; pale</td>
<td>Sloughy &amp; bloody</td>
<td></td>
</tr>
<tr>
<td>Pink</td>
<td>Pale</td>
<td>Red</td>
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<tr>
<td>Moderate</td>
<td>Painful</td>
<td>Non-painful</td>
<td></td>
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<tr>
<td>May be varicosities, venous eczema, haemosiderin deposits, lipodermatosclerosis</td>
<td>Loss of peripheral pulses</td>
<td>Sensory neuropathy</td>
<td></td>
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</tbody>
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Neuropathic ulcer


Ischaemic ulcer