

Diabetes foot assessments

– guiding document

The following information aims to guide the non podiatrist health professional to conduct a diabetes foot assessment that facilitates targeted referral to podiatry and education based on the persons risk profile.

Step 1: Establish the presence of previous or current foot ulceration, amputation or Charcot

Ask if the person has had or currently has a foot ulcer, Charcot and/or amputation, if YES they are immediately classified as 'at risk'.

Practice tips

- > It is important to ensure that feet are thoroughly checked for ulcers including between the toes and areas that the person may find difficult to see, as person may not be aware of them due to presence of neuropathy.
- > Look particularly at pressure areas eg tips of toes, ball of the foot, around the heels.
- > Ulcers are often present underneath callus and corns or between the toes. If callus or hard skin is present they need to be referred to podiatry for treatment.
- > If a patient has had a Charcot they are likely to have a significant level of neuropathy and foot deformity.

Step 2: Assessing sensation – neurological assessment

(10gm Monofilament)

- > **Ask person about neuropathic symptoms** eg numbness, tingling, creeping ants, shooting pains, burning and deep bone ache. Symptoms may be worse at night, may be present at diagnosis, may worsen with unstable blood glucose and may not accompany reduced sensation.
- > **Assess sensation using Monofilament.**
- > Explain that this test checks how much they can feel with their feet – it shows how healthy the nerves in the feet are. The more they can feel the better protected their feet are.
- > **Show them the monofilament, explain that it is NOT sharp as patients often think it is a needle and expect to feel a pin prick.** Demonstrate monofilament on the person's hand.
- > Ask the client to close their eyes and say 'yes' every time they feel something touch their foot.
- > Press the monofilament against the skin just enough to bend the fibre. Hold for 1 second and then release.
- > Use the monofilament at the locations on the assessment form. If there is significant hard skin or callus on any of the test sites use the nearest area of normal skin. Test each site once only.
- > Record findings on the chart. 6/6 indicates 'low risk'. 5/6 or less indicate 'at risk'.

Note: Monofilaments should not be stored in warm environments (ie in a car) as this will alter the pressure they apply. They should be replaced if the fibre becomes bent or damaged and every 6-12 months depending on frequency of use. Monofilaments can be cleaned with alcohol swab after each.



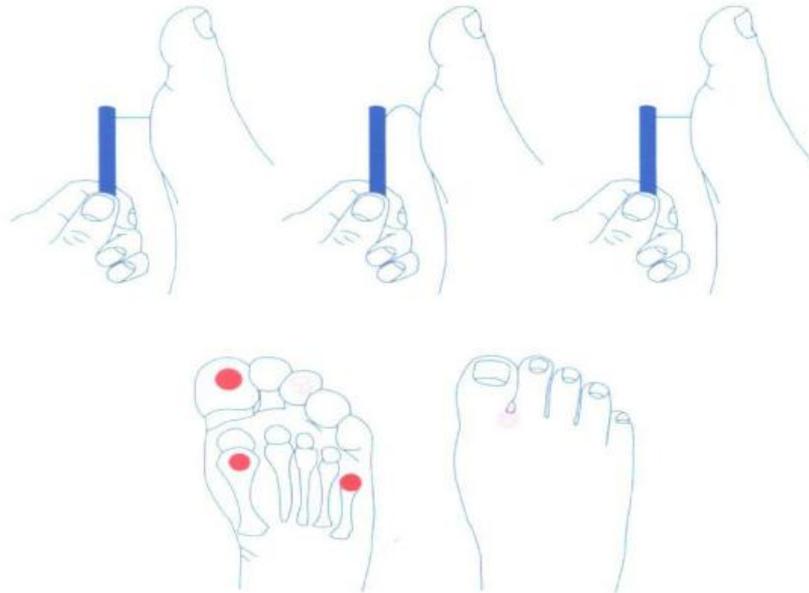


Fig 1: Monofilament bending

Figure 2—Upper panel: For performance of the 10-g monofilament test, the device is placed perpendicular to the skin, with pressure applied until the monofilament buckles. It should be held in place for ~1 s and then released. Lower panel: The monofilament test should be performed at the highlighted sites while the patient's eyes are closed.

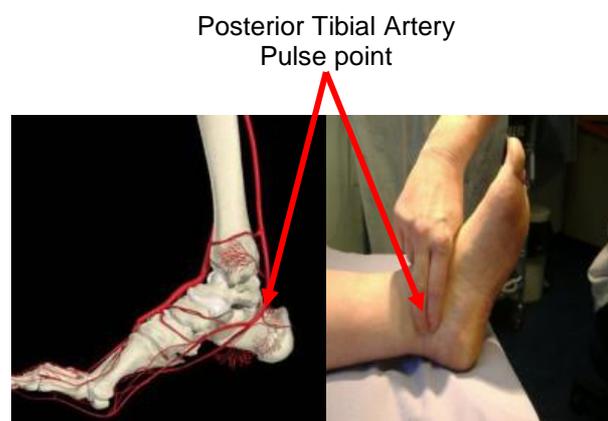
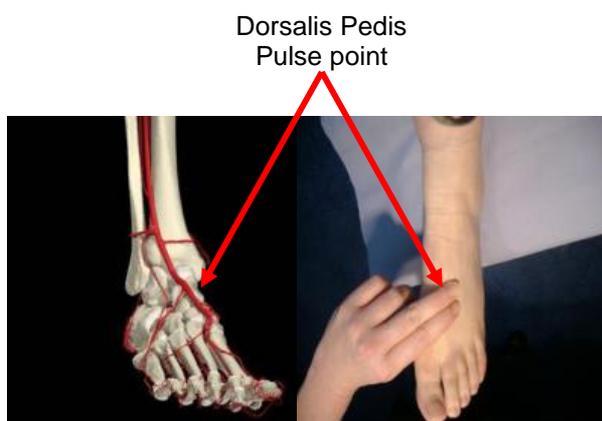
Adapted from Boulton A, Armstrong D, Albert S et al. Diabetes Care 2008; 31: 1679-1685

Step 3: Vascular assessment (pedal pulses)

- > Explain to client that this next assessment is to see what level of blood supply (circulation) they have in their feet.
- > Explain the better the blood supply the healthier their feet and the easier things will heal.
- > **A) Ask the patient about any symptoms of peripheral arterial disease.**
 - Ask if the patient gets any pain/cramp in their feet or legs especially the calf when they are walking (claudication pain), establish;
 - How far they can walk before the pain stops them?
 - Does it get worse if they are walking up a slope or upstairs.
 - Do they wake up in the middle of the night due to pain that is relieved by hanging legs over the side of the bed or standing up (rest pain).
- > **B) Assess the circulation by palpating the Dorsalis Pedis and Posterior Tibial artery pulse in each foot.**
 - Record the pulse as present or absent or unable to perform (this may be due to oedema, or an amputation or other reason you cannot perform the test).
 - The person is a risk if one or more pulses are not palpable.

Practice tips:

If a pulse can't be found in the position depicted in the figures below, try again a couple of fingers width above or below the normal site. If the pulses cannot be palpated due to oedema or other reason, such as, active ulceration refer to podiatry for a Doppler assessment.



Other risk factors

Foot deformity

The aim of this part of the assessment is to ascertain if there are any obvious foot deformities. This assessment is only looking at obvious deformities. If there is anything that looks unusual a second screening with a podiatrist is indicated.

Bony prominences

Any prominent bones on the plantar or dorsal surface of the foot. Bunions are a common bony prominence.

Prominent metatarsal heads

Prominent metatarsal heads are often covered with callus (hard skin) that has built up due to pressure and dry skin.

Hammer or claw toes

Hammer toes describe toes that are flexed at both the proximal and distal interphalangeal joints of the toes. Claw toes are flexed at the proximal interphalangeal joint only.

Skin condition

Inspect the skin condition by looking to see if there are any corns or callous, dry or cracked skin, broken skin or signs of fungal infection.



Nail condition

Assess whether nails are thickened, fungal or ingrown.

Other considerations

The NH&MRC guidelines state that kidney disease, visual impairment, poor glycaemic control and smoking contribute to increased risk. These indicate the need for a podiatry referral.

Activities of daily living

This section is about self care ability. If any concerns are identified referral to podiatry for further assessment and planning is indicated.

Risk classification

The aim of this assessment is to ascertain whether the person has risk factors that indicate the need for a second in depth screen by a podiatrist. If any risk factors are identified then referral to podiatry should be made.

Action required

If at risk ensure referral is made to podiatry. Add any extra details to the 'Notes to podiatrist' section of the form. Photocopy the referral form as this will remain in the case notes as your record for the assessment that you have done.

For more information

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