Diabetes Foot Care Guidelines for Primary Healthcare Professionals

Strategies to Prevent Foot Ulcers and Amputation
1. Education of patient, family and healthcare providers.
2. Appropriate footwear.
3. Regular inspection and examination to identify the foot at risk.
4. Appropriate and timely referral.

Patient Education: Do's & Don'ts for the Foot at Risk

**Do's:**
- Inspect your feet daily, including areas between the toes.
- Ask someone else to inspect your feet if your vision is poor.
- Wash your feet daily.
- Dry your feet carefully, especially between the toes.
- Test the water temperature with your hand, not your foot.
- Inspect and feel the inside of your shoes daily.
- Moisturize dry/cracked feet daily by applying oils/creams.
- Change your socks/stockings daily.
- Clip your nails straight across (Fig. 1).
- Insist that your diacarecure examine your bare feet.
- Notify your doctor/nurse at once if you have a blister/cut/sore.

**Don'ts:**
- Do not let your feet soak in standing water or foot spa's.
- Do not walk barefoot.
- Do not wear shoes without socks.
- Do not use medicines or plasters to remove corns and callus.
- Do not cut corns and callus yourselves.
- Do not apply moisturising creams between your toes.
- Do not treat your own feet (e.g., clipping nails) if your vision is poor.
- Do not use hot water bottles and heaters near your feet.

Annual Foot Screening
Identification of the Foot at Risk

Who to Screen
- Type 1 diabetes > 5 years duration
- All type 2 diabetes from diagnosis

How to Screen
Complete the compulsory annual questionnaire below.

Annual Foot Assessment Questionnaire
Are any of the following present in either the left or right foot?

**Category A**
- Bone/Joint Abnormality
  - Deformity (e.g., claw toes, hammer toes, hallux valgus)
  - Bony prominences, areas of abnormal pressure
  - Loss of joint mobility (e.g., hallux rigidus)
- Skin
  - Callus, corns, cracks, interdigital maceration
  - Inappropriate footwear

**Category B**
- Protective sensation
  - Monofilament sensation abnormal at any spot on ≥2 attempts
- Ulcer
- Past history of
  - Ulcer
  - Amputation
- Vascular
  - Claudication or rest pain
  - Absent dorsalis pedis pulse and absent posterior tibial pulse

Action Required
If any one answer is 'yes' the foot is at risk for ulceration/amputation. The foot must then be assessed at EVERY visit. Intervene and refer appropriately.

Appropriate Footwear
- Inappropriate footwear is a major preventable cause of ulceration.
- Patients with normal protective sensation can select off-the-shelf footwear.
- Patients with neuropathy, ischaemia/deformity need extra care with footwear.
- The shoe should not be too tight or too loose.
- Internal shoe length should be 1-2 cm longer than the foot.
- Internal shoe width should be equal to the width of the foot (Fig. 2).
- Toe height should allow enough room for the toes.
- Fitting must be evaluated with the patient standing.
- Refer to an orthotist (for special footwear): if fitting is too tight due to deformity.
- There are signs of abnormal loading (hyperaemia, callus, ulceration).

Examination of the Foot for Protective Sensation Using the 10g (Semmes-Weinstein) Monofilament

1. Apply the filament on the patient's hand so he/she knows what to expect.
2. The patient must not be able to see if and where filament is applied.
3. Three sites must be tested on each foot (Fig. 3).
4. Apply monofilament perpendicular to the skin surface with sufficient force to cause the filament to buckle against the skin for no more than 2 seconds (Fig. 4). Do not allow the filament to slide across the skin and do not probe repetitively at the test site.
5. Ask the patient if (yes/no) and WHERE (left/right) the feel the pressure.
6. Perform this twice at the same site, but also perform at least one “sham” application, in which no filament is applied (total three questions/site).

Additional information may be obtained by assessing vibration sense (128 Hz tuning fork), ankle reflexes, pain sensation (pinprick) and light touch (cotton wool).


[For more information visit http://www.semdsa.org.za/guidelines.htm]