



**This is a guide only and does not
replace clinical judgment**

References:

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Diabetic Foot Ulcers

Information for health professionals



Diabetic Foot Ulcers

Assessment

- Take a comprehensive medical, ulcer and psychosocial history
- Assess for peripheral arterial disease (PAD): history, pedal pulses, skin, Doppler waveforms, Ankle Brachial Pressure Index (ABPI) or toe brachial index (TBI). An ABPI of <0.9 or TBI <0.75 suggests PAD. An ABPI >1.3 needs investigation.
- Assess for neuropathy via clinical, monofilament, and vibration testing
- Assess for structural abnormality
- Classify the risk of foot ulcer development as:
 - very low: no risk factors present
 - low: loss of sensation or PAD
 - moderate: loss of sensation + PAD/foot deformity, or PAD + foot deformity
 - high: loss of sensation or PAD, AND either past foot ulcer/amputation, or end-stage renal disease
- Classify ulcer as neuropathic, neuro-ischaemic or ischaemic
- Regularly document wound characteristics and progress in healing

Management

- Involve a multi-disciplinary team. Consider remote expert advice with digital imaging for people living in remote areas.
- Offloading of pressure points is necessary:
 - for neuropathic plantar ulcers use non-removable knee-high devices, or total contact cast. Alternatives are removable devices, or felted foam with appropriate footwear.
 - for non-plantar ulcers, consider surgery, knee or ankle-high devices, footwear modifications
 - consult a specialist if infection or ischaemia is present
- Refer for acute specialist help when there is fever/sepsis, limb ischaemia, suspected deep tissue/bone infection, or gangrene
- Refer for revascularisation if: ABI <0.5 , toe pressure $<30\text{mmHg}$, critical limb ischemia (rest pain, failure to heal, tissue loss)
- Facilitate oxygenation of wound environment—avoid dehydration, smoking, cold, stress, pain
- Optimise glucose control
- Gently cleanse ulcer with a neutral solution
- Remove necrotic and devitalised tissue, unless revascularisation is necessary



- Debridement should only be undertaken by trained health professionals
- Re-evaluate treatment if the ulcer fails to reduce by 50% after four weeks
- If infection is present:
 - obtain soft tissue biopsy for culture
 - treat infection with an effective antibiotic
 - refer those with suspected osteomyelitis
 - hospitalise those with severe foot infection
- Additional therapy may help clients, including
 - topical negative pressure therapy
 - cellular and acellular skin equivalents
 - hyperbaric oxygen therapy

Prevention

- All clients at moderate or higher risk need protective therapeutic footwear
- Provide education to clients at risk on appropriate shoes indoors and out; safe foot care; and inspecting feet and insides of shoes daily
- A trained health professional should undertake a foot examination:
 - annually in those at very low risk
 - six–12 monthly for those at low risk
 - three–six monthly for those at moderate risk
 - one–three monthly for those at high risk
- Provide a foot protection program for those at moderate or high risk, including education, review and appropriate footwear