### **NICE** National Institute for Health and Care Excellence

# Foot care for inpatients with diabetes

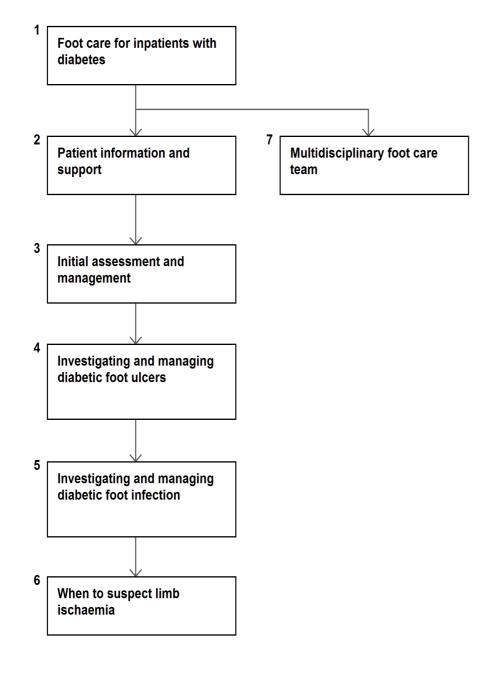
A NICE pathway brings together all NICE guidance, quality standards and materials to support implementation on a specific topic area. The pathways are interactive and designed to be used online. This pdf version gives you a single pathway diagram and uses numbering to link the boxes in the diagram to the associated recommendations.

To view the online version of this pathway visit:

http://pathways.nice.org.uk/pathways/diabetes

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## NICE Pathways



#### **1** Foot care for inpatients with diabetes

Within 24 hours of the patient being admitted or a foot problem being detected (if the patient is already in hospital):

- a named consultant should be accountable for the care of the patient and for ensuring that healthcare professionals provide timely care
- refer the patient to the multidisciplinary foot care team within 24 hours of the initial examination of the patient's feet. Transfer the responsibility of care to a consultant member of the multidisciplinary foot care team if a diabetic foot problem is the dominant clinical factor for inpatient care.



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#### Patient information and support

Offer patients consistent, relevant information and clear explanations that support informed decision making, and provide opportunities for them to discuss issues and ask questions.

Patients should have a named contact to provide information and to liaise between secondary and primary and/or community care.

#### Initial assessment and management

Examine the feet and record details of new and/or existing foot problems.

Examine the patient for signs and symptoms of systemic sepsis.

X-ray the affected foot (or feet).

If you suspect the following, obtain advice from an appropriate specialist:

- Charcot arthropathy
- systemic sepsis
- a deep-seated infection
- limb ischaemia.

#### 4 Investigating and managing diabetic foot ulcers

#### Investigation

Record the size and depth of the ulcer. Assess and record any signs of infection, ischaemia, neuropathy, gangrene or deformity.

#### Management

Debridement should only be done by healthcare professionals from the multidisciplinary foot care team using the technique that best matches their expertise, clinical experience, patient preference and site of the ulcer.

When choosing wound dressings, healthcare professionals from the multidisciplinary foot care team should take into account the wound, patient preference and the clinical circumstances, and should use wound dressings with the lowest acquisition cost.

Offer off-loading. Healthcare professionals from the multidisciplinary foot care team should take into account the wound, patient preference and the clinical circumstances, and should use the technique with the lowest acquisition cost.

Use pressure-relieving support surfaces and strategies in line with the NICE guideline on pressure ulcers (see the pressure ulcers pathway).

#### Interventions not recommended

Negative pressure wound therapy, unless in the context of a clinical trial or as rescue therapy (when the only other option is amputation).

Dermal or skin substitutes, electrical stimulation therapy, autologous platelet-rich plasma gel, growth factors, hyperbaric oxygen therapy unless in the context of a clinical trial.

#### 5 Investigating and managing diabetic foot infection

#### Investigation

Send a deep soft tissue sample (or a superficial swab) for microbiological examination.

If you suspect osteomyelitis but the initial X-ray was not diagnostic, carry out magnetic resonance imaging (MRI) or white blood cell scanning if MRI is contraindicated.

#### Management

Start antibiotic therapy based on infection severity, using the antibiotic with the lowest acquisition cost appropriate for the clinical situation. Take into account local antibiotic guidelines as well as the microbiology results.

Do not delay starting therapy for suspected osteomyelitis pending MRI results.

For mild infections, offer oral antibiotics with activity against Gram-positive organisms.

For moderate and severe infections, offer antibiotics with activity against Gram-positive and Gram-negative organisms, including anaerobic bacteria. For moderate infections use oral or intravenous; for severe infections start with intravenous and then reassess.

#### Interventions not recommended

The following are not recommended:

- X-rays or probe-to-bone testing to exclude osteomyelitis
- bone scans to diagnose osteomyelitis
- prolonged antibiotic therapy for mild soft tissue infections.

#### 6 When to suspect limb ischaemia

Obtain a history of any previous cardiovascular events and symptoms, including treatments and/or procedures.

Inspect the limb for colour and temperature, gangrene or tissue loss and presence or absence of a peripheral pulse.

Measure and document the ankle-brachial pressure where clinically possible and interpret the results carefully.

Arrange prompt specialist assessment.

#### 7 Multidisciplinary foot care team

Each hospital should have an inpatient care pathway, managed by a multidisciplinary foot care team.

The team should consist of healthcare professionals with the specialist skills to deliver inpatient care, including a diabetologist, a surgeon skilled in the management of the diabetic foot, a diabetes nurse specialist, a podiatrist and a tissue viability nurse, and the team should have access to other specialist services needed to deliver care.

The multidisciplinary foot care team should:

- assess and treat the patient's diabetes, which includes minimising the risk of cardiovascular events, and interventions for pre-existing chronic kidney disease or anaemia
- assess, review and evaluate the patient's response to initial medical, surgical and diabetes management
- assess the foot, and determine the need for specialist wound care, debridement, pressure off-loading and/or other surgical interventions
- assess the patient's pain and determine the need for treatment and access to specialist pain services
- perform a vascular assessment to determine the need for further interventions
- review the treatment of any infection
- assess the need for interventions to prevent the deterioration and development of foot deformities
- perform an orthotic assessment and treat to prevent recurrent disease of the foot
- have access to physiotherapy
- arrange discharge planning.

#### Glossary

#### Sources

Diabetic foot problems: inpatient management. NICE clinical guideline 119 (2011)

#### Your responsibility

The guidance in this pathway represents the view of NICE, which was arrived at after careful consideration of the evidence available. Those working in the NHS, local authorities, the wider public, voluntary and community sectors and the private sector should take it into account when carrying out their professional, managerial or voluntary duties. Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way which would be inconsistent with compliance with those duties.

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