Access to podiatry services is of paramount importance in managing potential and established foot problems related to diabetes

PATIENTS WITH poorly controlled diabetes are at a significant risk for foot ulceration, which has become a major predictor of lower limb amputation. The role of the podiatrist in the management of foot problems has been identified in recent years. It may be argued that access to podiatry services is of paramount importance in managing potential or established foot problems related to diabetes, and recent studies suggest that access to podiatry care can reduce the economic burden of diabetic foot ulcers in prevention and treatment.

Gabbay et al. suggest that podiatrists have a significant opportunity to explore motivational approaches to empower patients in changing behaviour which may improve quality of care and patient outcomes. This involves eliciting patients’ own intrinsic motivation for making necessary changes. As podiatrists are on the frontline of foot care, a combination of appropriate education, support and guidance can help increase patient motivation.

The classical barriers to healing arising from diabetic foot wounds include a deterioration of the vascular and/or the neurological status of the patient owing to a deterioration of glycaemic control which may be further complicated by a history of hyperlipidaemia and smoking. It is for these reasons that strong links must be formed with all care providers as the cause for ulceration is often multifactorial, which requires multidisciplinary care.

Nube et al. cited that a history of foot ulceration, ischaemia and foot deformity were significant predictors for re-ulceration. A complication of autonomic and sensory neuropathy can lead to an alteration in the structure of the foot which may lead to areas of high pressure which often results in ulceration.

Diabetic foot wounds are frequently treated in a multidisciplinary diabetes clinic. It is thought that the podiatrist contributes to the prevention and management of diabetic foot problems as follows:

• Adds to the patient education programme
• Early detection of vascular and neurological deterioration
• Biomechanical assessment
• Risk stratification
• Wound management and provision of sharp debridement.

Foot ulceration in diabetes can lead to lengthy hospital stays. As trauma is frequently considered to be a significant precipitator to ulceration, correctly identifying an area of increased pressure could reduce the event of ulceration. Footwear is often a strong contributor to the development of ulceration in the insensate foot. Foot ulcers caused by footwear often present on both feet in the same anatomical region, i.e. bilateral subungual haematoma.

When identified, it is often beneficial to classify a foot ulcer using a recognised wound classification system, such as Texas or Wagner, as this will help assess the need for specialist intervention. A review of the response to treatment will also assist in developing care programmes.

Diabetic foot ulcers are treated in both community and hospital settings. A strong link to support networks in a hospital setting can provide vital assistance in rapid access to the following services:

• Radiology
• Laboratory tests
• Vascular team
• Endocrinology team
• Community podiatry
• Orthotist – semi/fully bespoke footwear
• Tissue viability and wound care – community health clinic

Christine Kiernan
• Acute care – additional needs.

Access to the above services will allow expert assessment and emergency management where indicated. In the case of active foot disease (see Table 1), patients can also access specific debridement services with appropriate off-loading devices, such as specialised casting, where required.

The use of radiology services and laboratory blood tests can determine the difference between the pathological changes involved in the Charcot foot and osteomyelitis.

Where infection is suspected, it is helpful to swab any presenting exudate to isolate organisms. The choice of antibiotic will often depend on the clinical severity of the wound, if there is discomfort, substantial discharge or odour or if there is an epidemiologically significant coloniser. It is also important to assess the vascular status of the patient and if there is possibility of bony involvement.¹ ²

Timmins and Chadwick⁷ have identified the following core elements as essential to wound-healing in foot ulceration:
• Off-loading
• Debridement
• Re-vascularisation
• Infection control.

Appropriate dressing selection can also advance the wound healing process although, as the authors note, in the absence of the elements listed a dressing is unlikely to compensate.

Table 1 provides a comprehensive tool to assist in assessing and stratifying individual patient needs in order to provide a patient with a management plan:

Whether new patients present with a diabetic foot ulcer to a GP surgery, a community health centre or a hospital setting, it is vital that a brief vascular and neurological assessment takes place.

The importance of an educational programme is often underestimated and may help prevent the development of future ulceration if implemented appropriately.

Check the location of the wound to assist in determining the cause and assess the wound using a recognised classification system. Early detection and treatment can lead to favourable outcomes and increased patient empowerment. ¹

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References
5. Table 1 Recommendations, National Diabetes Working Group, June 2010
8. Timmins J, Chadwick P. Right product, right wound, right time, The Diabetic Foot Journal, 2010; 13(2)
9. The Infectious Disease Society of America sourced from: www.idsociety.org

<table>
<thead>
<tr>
<th>Risk group</th>
<th>Risk category</th>
<th>Foot examination frequency</th>
<th>Examiner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Low risk</td>
<td>Annual</td>
<td>Primary care nurse or GP</td>
</tr>
<tr>
<td>Amber</td>
<td>At risk (moderate-risk category)</td>
<td>Annual or more frequently (as per individual requirements)</td>
<td>GP/primary care nurse/community podiatrist/hospital diabetes clinic</td>
</tr>
<tr>
<td>Pink</td>
<td>At risk (high-risk category)</td>
<td>Annual or more frequently in specialised clinic and community clinic (as per individual requirements)</td>
<td>GP/primary care nurse/community podiatrist (plus formal annual review by foot protection team podiatrist)</td>
</tr>
<tr>
<td>Red</td>
<td>Active foot disease</td>
<td>At least once weekly or as required by a member of the diabetes multidisciplinary team</td>
<td>Foot protection team/ diabetes multidisciplinary team</td>
</tr>
</tbody>
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