New NICE guidelines on diabetic foot disease prevention and management

With the rapid increase in the prevalence of diabetes, it is estimated that there will be 5,000,000 people with diabetes in the UK by 2025. Both the personal and the socioeconomic impact of diabetic foot disease is very significant and the cost estimate to the NHS in 2012 was around £600 million.

The latest NICE guidelines
The main thrust of NICE’s new guidance document, NG19, on the prevention and management of diabetic foot disease, is around the importance of patient-centred care which is highlighted as 10 salient points in one main section. The document focuses in detail on the importance of prevention of foot ulceration and its active management, with key considerations regarding the diagnosis and management of Charcot arthropathy. The importance of patient review within 24 hours is once again highlighted, as is the need for having an established care pathway in all hospital and clinic settings. The patient should essentially be referred to the multidisciplinary foot team within 24 hours in order to provide best possible care; commissioners and service providers should also ensure that a diabetes multidisciplinary foot care service and robust protocols with clear pathways are available across all health care settings.

There is still clearly an incongruity of services across different areas and this is highlighted by the clear-cut variance in amputation rate across the nation. The importance of close networking between diabetology and podiatry with biomechanics, tissue viability, diabetes specialist nursing, vascular and orthopaedic surgery, and interventional radiology is also highlighted.

The document mentions the importance of easy access to patients with disability or who are housebound or living in the care of nursing homes. This is certainly of utmost significance because of the noticeable high prevalence of patients with poor mobility and diabetic foot disease.

The importance of risk assessment is also highlighted, with risk stratification into low, moderate and high category levels. Patients at moderate risk should be referred to the foot protection service, whereas those with low risk should have annual assessment for neuropathy, ischaemia and foot deformity. On the other hand, patients with an active foot complication (high risk) should be referred to the foot protection service or multidisciplinary foot care service within 24 hours of assessment so that individualised treatment can be provided acutely according to local protocol.

One must remember that patients with active foot disease often have comorbidities such as cardiovascular disease, and this may need further investigation at the same time of assessment. Protocols for offloading, control of foot infection and management of ischaemia should all be in place. Certain therapies such as electrical stimulation therapy, growth factor treatment and hyperbaric oxygen therapy should not be offered as routine treatment unless part of a clinical trial. Monitoring of foot infections should include soft tissue and bone samples or superficial swabs when these cannot be obtained. The importance of appropriate radiology including plain radiography and MR scanning for diagnosis of osteomyelitis is also highlighted. Prompt initiation of antibiotic therapy is mandatory in the management of diabetic foot infection and the choice of antibiotics should be based on structured hospital protocols, personal preferences and the particular clinical situation. The response to antibiotics should be based on both clinical response and results of microbiology specimens. Duration of antibiotic therapy should be based on severity of infection and type of bacterial growth, with prolonged antibiotic therapy usually necessary for patients with established osteomyelitis.

The importance of Charcot arthropathy is also highlighted in a separate section emphasising the need for urgent referral to the multidisciplinary foot care team. Plain radiography, followed by MR scan if plain X-ray is normal, is crucial in the early diagnosis of Charcot foot. Early offloading and close monitoring by means of foot skin temperatures and serial X-rays are an important part of clinical management and bisphosphonates should not be used to treat Charcot arthropathy unless part of a clinical trial.

In a separate section, the new NICE guidelines also make some research recommendations for treatments such as negative pressure wound therapy, maggot debridement, and a proposition for more randomised control trials looking at the clinical effectiveness of different ulcer dressings.

Conclusion
The consultation draft document for NICE guidelines for diabetic foot disease is a very detailed and thorough 166-page document. It emphasises the importance of regular screening for diabetic foot disease and, most importantly, early referral to the diabetic foot team. Early recognition and prompt specialist management are pivotal to ensuring a patient-centred care pathway of excellence.

David Coppini, Consultant Diabetologist and Endocrinologist, Poole Hospital NHS Foundation Trust, Poole, UK

Reference
1. NICE. Diabetic foot problems: prevention and management. NICE guidelines [NG19]. NICE, August 2015.