Management of Foot Complications in Diabetes

Key Points

1. Integrated Care

- Management of the foot in diabetes requires closely integrated care which crosses conventional professional boundaries.

2. Prevention of Active Foot Disease

- All people with diabetes should have their feet examined annually to detect those at risk. Those at increased risk are those with peripheral arterial disease, neuropathy, or deformity. Those at greatest risk are those who have had a previous foot problem, and those with end stage renal failure.
- Those at increased risk should remain under surveillance by a specialist with attempts made to reduce onset of new active foot disease – by regular examination, podiatry, education and provision of orthoses (when appropriate).

3. Management of new (or deteriorating) ulcer, or the hot red swollen foot including necrosis/gangrene and active charcot foot.

- All newly occurring disease whether in the community or hospital should be referred via the Diabetes SPA (single point of access) to the Diabetic MDT foot clinic (or A&E out of hours) within one working day. **barnsleydiabetes.spa@nhs.net Telephone queries 01226 435678**

4. Management of the person whose foot disease has healed

- The risk of a new problem is 40% within 12 months
- The overall mortality of people with foot disease is 50% at 5 years. Strenuous steps should be taken to minimise cardiovascular risk.

Integrated Care

Disease of the foot is complex and multifactorial, with different people having different dominant problems. Each person with foot disease must have access to professionals with skills and resources necessary to assess and correctly manage any infection, peripheral arterial disease and any requirement for off-loading arising from neuropathy. It is for this reason that most foot disease requires the input of a number of professionals with the necessary complementary skills who work either together or in close communication with each other. Management of the foot in diabetes requires closely integrated care which crosses conventional professional boundaries. This care is shared between:

- ***Generalist Practitioner or Practice Nurse*** with the skills necessary to identify the foot at increased risk.

- ***Community Podiatrist*** - A Health Care Professions Council registered podiatrist working primarily in a community setting**.**

- ***Diabetes Specialist Podiatrist*** – A highly specialised podiatrist with a relevant post, and graduate qualification in the podiatric care of patients with diabetes.

- ***Multidisciplinary Foot Care Team (MDT)*** – A team of highly expert diabetes specialist physicians, podiatrists, orthotists and nurses who together have the necessary skills to assess and manage diabetic foot disease. The team must have ready access to input from vascular and orthopaedic surgeons, plaster casting, microbiological support, appropriate imaging and in-patient beds. Because of the multiple skills and resources required, the MDT will usually be located in secondary care.

Reviewed by Sarah-May Poppleton Sept 2019

Roles and responsibilities

The appropriately trained generalist practitioner will be responsible for providing annual foot screening, education and information for all 'low risk' patients. Patients found to be at increased risk should be referred to the Podiatry service. All newly occurring active disease of the foot should by referred to the MDT.

The Community Podiatry service will be responsible for providing assessment and appropriate foot care, including education and information, to all patients identified as being at 'moderate' or high risk'. They will be responsible for ensuring appropriate ongoing monitoring, with a focus on prevention and early intervention. They will refer on to the Multidisciplinary Foot Care team in a timely manner if 'Active foot disease' occurs (ulceration, infection, acute Charcot neuroarthropathy, gangrene). They will also refer any newly-occurring active foot disease to the expert MDT.

The Diabetes Specialist Podiatrist will be responsible for providing expert diabetes podiatric input to the Multidisciplinary Foot Care Team and in the community setting. They will also be responsible for setting and maintaining clinical standards and providing expert advice and support.

The Multidisciplinary Foot Care Team will be responsible for providing care for all foot care emergencies and coordinating the care of those with 'Active foot disease'.

Prevention of active foot disease

Risk Classification with advice and onward referral

Risk factors influencing risk status

- **Neuropathy (loss of sensation)**
- **Limb ischaemia (reduced blood supply)**
- **Callus (hard skin)**
- **Foot deformity**

People with diabetes should have their degree of foot risk classified, and their routine surveillance adjusted on the result.

Low Risk: None of the above risk factors.

- Those at low risk require basic foot care education, including action to be taken if they develop an active foot problem. The patient can be managed within primary care.

Moderate Risk: The patient has only one of the above risk factors.

High Risk: Previous foot ulceration or amputation, on renal dialysis or more than one risk factor listed above.

- Those at moderate or high risk require assessment by a podiatrist who will formulate a management plan dependent on individual needs,and including ongoing regular expert review and education.

Active foot disease

Foot ulceration, spreading infection, gangrene, acute Charcot neuroarthropathy (unexplained hot, swollen foot with or without pain).

All patients with active foot disease must be referred to the MDT within one working day (NICE, NG19, 2015) or to A&E when out-of-hours. For contact details please go to: Referral to Community and Specialist Services

Reviewed by Sarah-May Poppleton Sept 2019