Putting Feet First: Halving the number of major amputations in diabetes by 2013

William Jeffcoate

A note to the Reader: *Your copy of* Putting Feet First *was posted with this issue of* The Diabetic Foot Journal. *I urge you to discuss it with colleagues and managers to see how specialist care can be improved in your area.*

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The aim of reducing the incidence of major amputation in diabetes was first flagged in the St Vincent Declaration 20 years ago (World Health Organisation and International Diabetes Federation, 1989), but without great success. Available data suggest that if there has been any fall in the incidence of amputation, it has not been spectacular. Some might say that this is not surprising because the main factors that lead to ulceration (and thence to amputation) are neuropathy and peripheral arterial disease – both of which result from years of poor glycaemic control – and are, therefore, beyond the influence of the expert clinician who treats an established diabetic foot ulcer. The options in expert diabetic foot care are limited: it is often a case of shutting the stable door after the horse has bolted.

Despite this, one or two centres in the UK have, in the past 15 years, shown that reconfiguration of diabetic foot care services may have a dramatic impact on the incidence of major amputation. Clinicians in Middlesbrough reported a four-fold reduction in the incidence of major amputation (3.11 to 0.76/1000 people with diabetes/year) in the 4 years following the institution in 1995 of a specialist multidisciplinary diabetic foot care service (Canavan et al, 2008). Meanwhile, the specialist multidisciplinary diabetic foot care service in Ipswich reported a six-fold reduction in major amputation (4.14 to 0.67/1000 people with diabetes/year), and this was maintained for 10 years, up to 2005 (Krishnan et al, 2008).

In each case, the hospital at which the diabetic foot care service was based was the only one serving a circumscribed community and the final levels of major amputation achieved per head of population are among the lowest reported anywhere in the world.

The experiences of these two centres suggest that, even though it may be thought that the onset of new foot disease is difficult for clinicians to influence, the reorganisation of specialist diabetic foot care services may still save four or more out of every five limbs that would otherwise have been lost. These observations cannot be ignored. Steps need to be taken to see if the reductions in the incidence of major amputation achieved by the Ipswich and Middlesbrough diabetic foot care services can be emulated elsewhere.

A model for improving inpatient diabetic foot care

Reconfiguration of diabetic foot care services in hospitals is the subject of the report *Putting Feet First* produced jointly by Diabetes UK and NHS Diabetes (2009). The aims of the report are:

1. To ensure that every person with diabetes who is admitted to hospital has their feet examined, and that; (i) those without active foot disease are assessed for risk of developing new disease while in hospital (primarily pressure sores) and appropriate preventive measures taken; and (ii) those with active foot disease are assessed within one working day by a member of a specialist multidisciplinary diabetic foot care team and treated appropriately.
2. To ensure that every Trust providing services for the care of people with diabetes has ready access to the facilities of a multidisciplinary diabetic foot care team.
3. To empower people with diabetes and their families to ensure that they are provided with the foot assessment and treatment to which they are entitled.

Guidance and commissioning for the diabetic foot

New NICE (2010) guidance focusing on inpatient diabetic foot care and its organisation and delivery is currently in the draft scope stage, and is due to be issued in early 2011, and the principles outlined in *Putting Feet First* are already an integral part of the commissioning guidance issued by NHS Diabetes (2010) in England. Indeed, this commissioning guidance emphasises that the best outcome for those with diabetic foot disease can only be achieved by close integration of healthcare services in primary and secondary care, and between different groups of healthcare professionals, by crossing conventional healthcare boundaries.

The key to effective diabetic foot disease management is rapid referral; each new case of diabetic foot disease needs to be treated by professionals who have both the necessary skills and the close professional links with other expert groups to achieve the best outcome.

Halving amputation incidence by 2013

The team responsible for ensuring the implementation of *Putting Feet First* has set itself the target of halving the incidence of major amputation in diabetes in the UK by 2013.

The first task will be to set up an "atlas of amputation" to determine the actual incidence of major amputation in diabetes (as far as it is known), and to search for differences in incidence between Strategic Health Authorities, PCTs and hospital Trusts. When differences are found, explanations will be sought.

The target of halving the incidence of amputations by 2013 is a massive one, but the data suggest it is achievable. If it is achievable, then it is up to us all to make sure that it is achieved. ■

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