Diabetic foot

A global health challenge

Stephen A Margolis

Be sure you put your feet in the right place, and then stand firm.

- Abraham Lincoln¹

As noted by Leonardo da Vinci, 'the human foot is a masterpiece of engineering and a work of art',² evolving over eons with a unique design for propulsion and support.³ However, it would seem that overall we do not afford the foot great interest, adopting at an early age footwear that may not be especially supportive and restricting movement.⁴ When combined with the hard surfaces we regularly tread, strong and mobile feet are not the usual outcome.⁴

The humble foot is perhaps the last item on a medical student's list of study issues while preparing for final exams. Yet, foot health is ranked fifth of the nine National Health Priorities of the Australian Health Ministers' Advisory Council when considered within the context of diabetic vascular and neurological complications.5 Diabetes is the seventh most common cause of death,6 with diabetic foot leading to amputation being one of the most feared complications of diabetes.7 Even so, diabetic foot remains relatively neglected, which is reflected in the rising prevalence: currently 6.3% (95% confidence interval [CI]: 5.4, 7.3) globally but 13.0% (95% CI: 10.0, 15.9) in North America. Perhaps the lack of focus explains the substantive social, medical and economic burdens that persist?8

There is a clear association between diabetic foot ulcer and diabetes duration, peripheral sensory neuropathy, and symptomatic and clinically detectable peripheral vascular disease.⁹ Additionally, Aboriginal and Torres Strait Islander peoples have a 3–6 times greater risk of diabetic foot ulcer than the non-Indigenous population. 9-11

Australian data provide indirect evidence that strategies to improve community- and hospital-based foot care for patients with type 2 diabetes are beneficial.9 In this month's issue of Australian Journal of General Practice, Reardon and colleagues explore the multidisciplinary approach focusing on frequent assessment, early recognition and management of diabetic foot as the central focus in reducing the associated morbidity and mortality.12 Aitken explores the role of peripheral vascular disease, detailing the current challenges with prescription and adherence to evidence-based secondary prevention therapy interventions with proven benefit.13

Diabetic foot remains a global public health challenge and is a significant cause of morbidity and mortality. Interventions including a formal care plan and foot protection program that focuses on prevention, patient education, multidisciplinary care and close monitoring and treatment of foot ulcers can substantially reduce amputation rates.¹⁴

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