Diabetes can have devastating effects on an individual’s health and quality of life; add considerable pressure to an already overburdened healthcare system; and rob a nation of productive citizens through premature death. The enormous health, social and financial costs of managing diabetes in Canada continues to increase. Canadians affected by diabetes will grow from 2.5 million in 2010, to 3.7 million in 2020, or nearly 10% of the population (Canadian Diabetes Association, 2009). The total economic burden of this disease will jump from $6.3 billion annually, to $16.9 billion annually by 2020.

Cost-effective and highly feasible interventions to mitigate diabetic disease burden have been identified by the Disease Control Priorities Project (Venkat Narayan et al, 2006). These include:

- Effective glycemic control (using insulin, oral agents, diet and exercise).
- Blood pressure control (using medications).
- Foot care (education, foot examination, hygiene, and proper footwear).

Without general acceptance and adherence to these recommendations on an international scale, people with diabetes continue to develop predictable complications of the disease, and are hospitalised at higher rates for stroke, hypertension, heart attacks, chronic kidney disease and – one of the most costly – lower-limb amputations.

Healthcare practitioners are acutely aware of the dire consequences when diabetic neuropathy leads to a foot ulcer which, when complicated by ischemia and infection, can eventually lead to amputation. In fact, 85% of amputations are preceded by the development of a diabetic foot ulcer (Palumbo et al, 1985). Post-amputation, patients not only suffer the clinical and psychological consequences of limb loss, but the amputation itself portends a 5-year mortality, which is higher than breast cancer in females and prostate cancer in males (Armstrong et al, 2007). Unfortunately however, the care of the diabetic foot and its related conditions remains less than optimal. It also has significantly less public and professional awareness and profile than both cancers.

Reasons for this are multifactorial. Clearly, the complicated physiology of the diabetic foot plays a part. The major underlying biological contributors to the development of full-thickness skin ulcers include diabetic neuropathy (including sensory, autonomic and motor components), as well as ischemia due to macro- and micro-vascular disease (Akbari and LoGerfo, 2002). Structural deformities contribute to skin breakdown, which may be complicated by infection and gangrene. The spectre of limb amputation may eventually follow.

Because of the multitude of precipitating factors for the development of the diabetic foot and its complications, the care of this condition has been fragmented and haphazard, dependant upon the practitioners the patient happens to be seeing, which local resources are available and other unregulated factors.

What is needed, then, is a reconceptualization of the diabetic foot as a disease in its own right. The concept of disease has evolved over the centuries. Ancient societies regarded it as something that caused suffering, and was explained by supernatural phenomenon. Diseases were later explained by imbalances in nature; then by altered anatomy, physiology, chemistry and now are explained through genetics (Duffin, 1999). As the explanations have become more mechanistic, the conditions constituting disease have expanded – from those that currently have few organic explanations but debilitating symptoms (chronic fatigue syndrome), to those that have no symptoms but definite organic...
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findings (hypertension and carcinoma in situ). Certainly, the concept of disease is also affected by social constructs, and even, some would argue, industry-supported agendas.

We propose that the concept of the diabetic foot as a disease is predicated on the existence of clear, irrefutable symptoms and signs of the ravages of diabetes on the foot, changes in structure and function and the significantly increased risk of serious adverse consequences in the event of poorly managed care. This conceptualization can serve to improve patient-physician communication; clarify areas of patient responsibility (Temple et al, 2001), increase societal awareness and increase financial investment in research and health care.

The International Working Group on the Diabetic Foot has developed a practical set of organisational recommendations to address the issue (Bakker et al, 2012). General recommendations for diabetic foot care are summarized below, with local adaptations to the Canadian context:

• Implementation of interprofessional guidelines for education, screening, risk reduction, treatment, and auditing.
• Self-management education for patients and family members.
• A system to detect people who are at risk, with annual foot examination of all patients and regular screening with the frequency determined by risk.
• Free preventative foot care services at the point of care for people living with diabetes.
• Public reimbursement of preventative shoes, socks and ‘off-loading’ devices for people with no private insurance coverage. Policy options include changes to the Trillium Drug Plan and Assistive Devices Programs.
• Establishment of multiprofessional teams for foot care for all Canadians with diabetes, and a well-defined referral pattern in each community.
• Prompt and effective treatment, if foot complications arise, by the integrated team that includes primary care practitioners, nurses, chiropodist/podiatrists, wound care specialists, endocrinologists, vascular surgeons, and infectious disease specialists.

Auditing of all aspects of the service to ensure that local practice meets accepted national and international standards of care.

The launch of this journal has been designed to inspire and coalesce the forces necessary to develop local, provincial, and national strategies to improve the care of patients presenting with a diabetic foot. Early, appropriate care can ultimately reduce foot ulcer incidence, limb amputation rates and eventually mortality rates for this debilitating disease.


