

# Friends of the Oppressed Foot?

The title of this editorial originates from an article in the "Herald Tribune" from 1889 entitled "Think of the Feet," which stated that the human foot is cruelly oppressed in the civilized world. It remarked that shoes were made too tight and "in utter defiance of the shape of the foot," resulting in "the foot being outraged from morning till night." Readers of *Diabetes Care* in the new millennium may well ask, "what has changed in the last 110 years?" When Ella Fitzgerald was interviewed in 1993 and asked what resulted in her major amputations, she replied, "I liked to wear pointy-toed evening shoes." Today, despite major steps in our understanding of the pathogenesis of diabetic foot disease, there is no evidence of any consistent reduction in amputation rates among diabetic patients in western countries, even in the Veterans Health Administration (VA) system; Mayfield et al. (1) recently reported that whereas there was an overall reduction in major amputations in the VA population, such a reduction was not observed in Veterans with diabetes.

Footwear is probably one of the major reasons for the lack of progress in reducing foot ulceration and amputation rates. It is well recognized that shoes are a major cause of minor trauma that features in the pathways to both ulceration (2) and amputation (3). The pivotal role of appropriate footwear was recognized in the 1999 American Diabetes Association Consensus Development Conference on Diabetic Foot Wound Care (4).

In this issue of *Diabetes Care*, the article by Dahmen et al. (5) from Amsterdam is, therefore, a welcome addition to the literature. They propose a simple algorithm for use in the selection of appropriate shoe gear for the neuropathic foot. However, it is not perfect, because, as the authors admit (though no fault of their own), whereas some components of the algorithm are evidence-based, most are opinion-based. This highlights a major problem in the area of diabetic foot research—the lack of evidence-based studies (6). Of 2,348 randomized controlled trials of diabetes management identified by the Cochrane Diabetes Group, only

3% were concerned with the diabetic foot (6). Few studies have focussed solely on footwear (7). Many studies, including those recently published by Dargis et al. (8) and Faglia et al. (9), show reduced reulceration rates in patients with a previous history of ulceration that used a multiple intervention program, such as footwear. In addition, two randomized studies were identified by Mason et al. (7), and one of these showed a reduced ulceration recurrence rate in patients with previous neuropathic ulceration randomized to Italian therapeutic footwear (10). The other study, by Colagiuri et al. (11), reported reduced callus formation (a risk factor for ulceration) in high-risk patients randomized to receive custom-made rigid plastic orthotic devices.

A further major problem in this area is the question of compliance with the prescription and regular use of footwear. Since 1994, Medicare benefits have included 80% of the cost of therapeutic footwear, and yet in one study, only 6% of eligible physicians participated in this program (12). Also, do patients regularly wear their prescribed therapeutic footwear? Sadly, the answer is frequently "No." In one U.K. center, only 22% of patients regularly wore the footwear provided free of charge (13), and similar problems have been reported in the U.S. (14).

Thus, whereas the article in this issue by Dahmen et al. (5) is most welcome, it must be regarded as the first step down a long path. Not only do we need a good evidence-base for the provision of therapeutic footwear, but we also need research about psychosocial determinants of patient behavior (e.g., illness beliefs, mood, etc.) (15). There is no point in providing therapeutic footwear that will be left to gather dust in the closet; such footwear can only be "friends of the oppressed foot" if it is worn.

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