OBSERVATIONS

Reducing Foot Wounds in Diabetes

The recent observation in this journal (1) that long-term survival after diabetic foot wounds remains poor reminds me of the urgency of wound avoidance. Unfortunately, the report did not disclose the primary causes or initiating events that led to foot ulcerations. One might want to seriously consider the following when contemplating the prevention of such injuries.

I have served for 29 years in the Peripheral Vascular Disease Clinic of a large metropolitan hospital. We have seen many diabetic patients who had already lost all or part of one leg and wanted us to care for the remaining extremity. When I interview these patients, I always ask for the cause of the initial amputation. In every case, it has been an attempt to grind down or remove a callus, usually by a podiatrist but sometimes by the patient or a family member. I've also seen instances in my private practice of foot infections stemming from this kind of intervention.

In one striking case, I saw a patient in my office on a Friday afternoon. Both of his feet were without wounds. Unbeknownst to me, he made a routine visit to his podiatrist that evening. On Monday morning, I received a phone call from his podiatrist asking what antibiotic I wanted him to prescribe. I advised him to send the patient to my office immediately. I asked the patient what had occurred. He said that the podiatrist had ground down a callus on his great toe with a pumice stone. I removed 5 mL of pus from his swollen, inflamed toe. In spite of the frequency of this scenario, the American Diabetes Association still states that a "callus can be debrided with a scalpel by a foot care specialist or other health care professional" (2). Patient-oriented publications distributed by this professional organization actually advertise motorized grinding stones for use by patients on their own calluses.

Calluses occur naturally over pressure or shear sites to protect the underlying skin from injury. The appropriate treatment of calluses is to eliminate the pressure or shear. This is readily accomplished by stretching or replacing offending shoes or by providing orthotic shoe inserts to redistribute load. If, instead of debridement, this treatment were to become routine, tens of thousands of amputations and many more ulcerations could be prevented annually in the U.S. alone. (There may, however, be rare occasions where it may be helpful to reduce the thickness of a hard thick [>2 mm] callus in addition to the above measures.)

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