PRACTICE GAPS

Frequent Debridement for Healing of Chronic Wounds

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Chronic wounds, such as from diabetes and vascular disease, affect almost 7 million Americans annually, cost nearly $25 billion annually, and are associated with increased mortality.[1]

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Standard care for the treatment of chronic wounds includes debridement, with best evidence existing for diabetic foot ulcers, where secondary analysis of randomized trials suggests centers with higher frequency of debridement have superior healing rates.[2] The rationale for debridement is to remove tissue and debris that inhibit healing, which at times is obvious, for example, when necrotic eschar or excessive callus is present, but at other times is less obvious, for example, when trying to remove bacterial biofilms or abnormal host cells that may also contribute to slow healing. For example, keratinocytes adjacent to chronic wounds have a diminished ability to migrate and respond to growth factors and contribute to a pathogenic phenotype that inhibits healing.[2]

Wilcox et al[3] found more frequent debridement, performed weekly, was associated with faster healing times ($P < .001$). One explanation is that chronic wounds provide an environment conducive for inhibitors of healing, such as biofilms, to rapidly form and require a consistent approach to removal. Alternatively, the wound centers studied often see patients on a routine basis and use evidenced-based algorithms for care that include debridement, with this constellation of care resulting in improved outcomes. In either case, these data provide a best-practice approach, to which most dermatologists likely do not adhere, and as such represent a practice gap. Because of a lack of either appreciation of the need for a consistent approach or understanding of the importance of debridement, many are likely not performing debridement enough.

To overcome this gap, medical professionals need to be educated about the types of debridement; the goals and importance of debridement, such as attending wound sessions at the American Academy of Dermatology or at wound healing meetings (www.sawc.org); and the systematic approaches to evaluation and management, including, but not limited to, debridement, such as from the evidenced-based guidelines for chronic wounds (www.woundheal.org/index.php?option=com_content&view=article&id=180). For example, excisional debridement of the wound bed and edges with a scalpel is often performed initially to remove all inhibitors to healing, and thereafter maintenance debridement is performed on a regular (weekly or every second week) basis using either surgical or nonsurgical (enzymatic or autolytic debridement among others) techniques. Training for dermatology residents should include experience with debridement and managing wounds. However, education is not limited to physicians because general staff members need training to make debridement and care of patients with a wound efficient to fit the flow of dermatology practice. To ensure wounds are improving, close tracking of wound size reduction by measurements or photographs is needed, and the use of templates for patient care and procedures can be incorporated into electronic medical records, which can serve as a resource to ensure all elements of evaluation and management are performed. This can also include alerts when advanced therapies are needed (typically if standard care fails to reduce wound size by 40%-50% in 4 weeks) and/or when referral to wound experts should be initiated.

ARTICLE INFORMATION

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