Managing Venous Leg Ulcers in the Home

Kathy Tavernelli, BSN, RN-BC, CWOCN; Sue Reif, BSN, RN, CWOCN; and Tim Larsen, BSN, RN, CWOCN
Cleveland Clinic Home Care
Cleveland, Ohio

Venous leg ulcers (VLUs) present treatment challenges, particularly in the home health setting. Home health care patients with VLUs often have multiple comorbidities, which complicate wound treatment and healing. Many patients are unable to see a physician regularly for wound assessment and treatment evaluation; in addition, they may face financial challenges, unable to afford costly prescription items — e.g., enzymatic debriding agents. Home health nurses must formulate a plan of care to address multiple factors including edema management, treatment compliance, compression use, supply cost containment, and decreasing nursing visits, with successful outcomes as the goal of care.

VLUs have a tendency to recur and become chronic. Slough tissue in the wound base and large amounts of drainage may make management involving traditional treatment with hydrocolloids, alginates, and foam dressings ineffective. Exorbitant use of supplies and more frequent nursing visits for dressing changes are financially burdensome for the patient, care provider, home care agency, and society in general.

Active Leptospermum honey dressings (ALHD) (Medihoney dressing, Derma Sciences, Inc., Princeton, NJ) offer clinicians an alternative for the management of VLUs in the home care setting. The dressings have been shown to be beneficial in reducing and removing nonviable tissue while maintaining a moist wound environment. They have been reported to reduce wound pain,1 edema,2 and malodor;3 promote autolytic debridement;4 and increase the velocity of healing.5 In a randomized controlled trial studying VLU debridement, Gethin and Cowan4 demonstrated that slough was reduced and healing rate increased in honey-treated wounds. A representative case study from our practice supports these findings.

Case Report

Ms. P, an 89-year-old Caucasian with a history of peripheral vascular disease and hypertension, had been seen at a local wound care center for treatment of chronic venous leg ulcers for 6 months but due to transportation issues, she could only follow-up at the wound care clinic monthly. She was referred to home care services for wound management. A thorough wound assessment was performed upon admission to home care and at subsequent visits by a WOC nurse. Ms. P presented with bilateral VLUs. On November 8, 2008, the left medial malleolar ulcer measured 6 cm x 4.0 cm x 0.2 cm (length x width x depth, respectively) (see Figure 1) and the left lateral malleolar ulcer measured 1 cm x 1.0 cm x 0.2 cm. Initial treatment included calcium alginate and Ace wraps for compression. Additional treatments included antimicrobial silver alginate and Unna boot dressings. During treatment with an antimicrobial silver alginate dressing, the wounds developed additional slough and a large amount of thick exudate with strong odor. Based on current evidence regarding the management of stalled leg ulcers, ALHD were initiated. The ulcers were cleansed with warm tap water and ALHD was applied to each ulcer and covered with an Unna boot for compression. The dressings were changed twice weekly. Within 1 week, the base of each wound desloughed, exudate and odor decreased, and wound pain lessened (see Figure 2). Ms. P and her nurse were pleased with the positive signs of wound healing, ease of application of the honey dressing, and the decrease in wound pain. The wound sites continued to progress toward healing and were closed in 2 months (by January 2, 2008) (see Figure 3).

ALHD have become the treatment option of choice when a VLU is not responding to traditional dressings; they provide clinical and cost benefits for wound management when other basic treatment options have failed or did not demonstrate...
effectiveness and wound healing progress stalled. Similar results have been observed in other wound types in our home care practice — ie, increased healing rates, rapid debridement of slough, decreased odor, and reduction in wound pain.6

Using Medihoney alginate with compression to treat difficult-to-heal VLUs has proven effective in reducing the frequency of dressing changes and skilled nursing visits; therefore, decreasing the costs of managing these patients for our home care agency.

References