Venous Ulcer Checklist

Cathy Thomas Hess, BSN, RN, CWOCN

Using a checklist to identify and manage wounds may be useful in your practice. This checklist reviews 1 type of wound, the venous ulcer.

Management of vascular ulcers has improved over the past decade as clinicians have come to realize the importance of proactive measures and a multidisciplinary team approach. Additionally, the introduction of newer treatment modalities, such as the use of growth factors and biologic skin replacements, holds the promise of treating difficult wounds, accelerating the wound healing process, and preventing new wound formation to a degree not previously thought possible.

Venous ulcers are believed to account for approximately 70% to 90% of chronic leg ulcers. The incidence of venous ulceration increases with age. Women are 3 times more likely than men to develop venous leg ulcers. Venous ulcers can be difficult to heal. In some studies, 50% of patients had venous ulcers that persisted for more than 9 months, and 20% had ulcers that did not heal for more than 2 years. After healing, more than 60% of patients experienced recurrence of venous ulcers. The proper diagnosis and management of venous ulcers begins with a basic understanding of the venous system of the lower extremities.

Assessment

The diagnosis of venous ulceration depends on a thorough history and physical examination. In obtaining the history, the clinician should focus on risk factors such as a history of deep vein thrombosis, leg trauma (crush injury, fracture, or surgery), congenital venous abnormality, limited mobility with impaireal calf muscle pump (arthritis, paralysis, muscular disorders), pregnancies, congestive heart failure, family history of venous disease, obesity, and advanced age.

Characteristic clinical findings are noted in Table 1 and include the presence of varicosities, hyperpigmentation, lipodermatosclerosis (LDS), and dermatitis. The shape of the leg may also provide a clue, as the “inverted bottle shape” is a sign of LDS. Venous ulcers tend to have flat wound edges, without undermining.

Table 1: CLINICAL FINDINGS ASSOCIATED WITH VENOUS LEG ULCERS

| Wound Location | 30%–40% of venous leg ulcers occur superior to the medial malleolus (near the saphenous vein); the rest occur mainly in the lower one-third of the calf |
| Appearance of wound bed | Referred to as “ruddy” or “beefy red”; granular in appearance |
| Wound shape/margins | Flat, irregular wound margins without undermining |
| Drainage/exudate | May be moderate to heavy, depending on the amount of edema |
| Surrounding skin | Venous dilation, including submalleolar venous flare (typical of venous insufficiency), telangiectasias, reticular veins, varicose veins, edema (typical of more advanced venous disease), atrophie blanche, maceration, hyperpigmentation (from hemosiderin staining), and lipodermatosclerosis. Scarring from prior healed ulcers may be noted. |
| Pain | Controversial. Many believe that pain is usually not present; however, several studies have reported severe pain occurring in as many as 76% of patients with venous ulcers. Deep ulcers, particularly around the malleoli, or small venous ulcers surrounded by atrophie blanche are the most painful. Generally, patients report that pain occurs with leg dependence (sitting, standing) and is reduced with leg elevation. |

Noninvasive vascular testing facilitates identification of the anatomic and pathologic aspects of this system. Use of the CEAP classification system improves documentation, assists in planning treatment strategies, and facilitates insurance approval of various treatments and/or surgical intervention.

Diagnostic Testing

Performing the appropriate diagnostic tests is paramount when evaluating a patient with a suspected venous ulcer. The results of the test will provide the basis for proper interventions and patient management.

Management

The key to treatment of any chronic wound is to address the underlying problem. Because elevated venous pressure and resulting edema are the problem with venous ulcers, compression therapy to control this is crucial to successful management. Leg elevation, dressings, debridement, and other treatments play a role as well.

At the end of the day, no matter how clinically competent we are, integrating checklists into our practice will improve our clinical and operational outcomes. If you have a checklist to share with our readership, please e-mail cthess@woundcarestrategies.com. Good luck!