

Arterial & Venous Ulcers: Vitaly Important Treatment Differences

Although many physicians routinely treat acute wounds in their day-to-day practice, the variety and complexity of chronic wounds presents a unique challenge. Hard-to-heal wounds, much like most chronic disease, requires intervention by multiple healthcare disciplines to address the many conditions and comorbidities that impact wound healing.

Venous and arterial ulcers are chronic wounds that typically occur on the lower leg. Though it can be difficult to differentiate between the two types of ulcers, the management pathways are distinctly different. Care decisions should be driven by an ankle-brachial index (ABI) as compression choices are selected based on ABI scores.

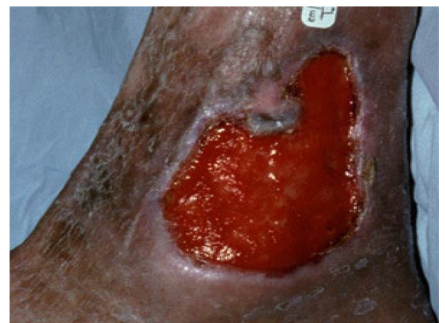
It is vitally important to distinguish between venous and arterial ulcers. Venous ulcers will respond to compression therapy, which is the primary treatment intervention, while arterial ulcer may actually be worsened by compression therapy. Unfortunately, mixed etiology ulcers do occur. As a result, some 20% of patients with a venous ulcers will have underlying arterial disease. The key from a management perspective is to evaluate all lower extremity ulcers for arterial disease by appropriate vascular screening to ensure that any component of underlying arterial disease is addressed prior to the use of any compression therapy.

Venous ulcers commonly occur in patients with a history of varicose veins, blood clots, or leg swelling. Many venous ulcers are painful, so appropriate pain relief and advice should be considered. Ninety-five percent of venous ulcers occur below the knee are on the medial aspect of the leg. Venous ulcers are never located on the foot or toes.

Arterial ulceration is due to reduced arterial blood flow to the lower limb. The most common cause is atherosclerotic disease of the medium and large arteries. In addition, concurrent hypertension may damage the intimal layer of the artery. Reduction in arterial blood supply results in tissue hypoxia and tissue damage. Thrombolytic and athroembolic episodes may contribute to tissue damage and ulcer formation. These ulcers typically occur over the toes and bony prominences of the foot. These ulcers appear punched out with well-demarcated edges and a pale, non-granulating, often necrotic base. Surrounding tissue may exhibit dusky erythema, cool to touch, hairless, thin and brittle, with a shiny texture. Toenails become thicken and opaque, and may be lost. Gangrene (wet or dry) may be present. Examination of the arterial system reveal decreased or absent pulses.



Arterial ulcer



Venous ulcer

References

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