

Differentiating Lower Leg Wounds – Part 1

Venous Stasis Ulcers

What Are They? Venous stasis ulcers are the most common etiology of lower extremity ulceration, affecting approximately 1 percent of the U.S. population. Venous skin ulcers are caused by poor blood circulation from the lower legs causing a backup of fluid in the legs. Your veins have one-way valves that keep blood flowing toward the heart. In venous insufficiency, the valves are damaged, and blood backs up and pools in the vein. Fluid may leak out of the vein and into the surrounding tissue. This can lead to a breakdown of the tissue and an ulcer.

Predisposing factors include history of DVT, phlebitis, obesity, congestive heart failure, trauma, immobility, advanced age.

Typical location where these wounds appear is in the “gaiter” region, the medial aspect of lower leg between knee and ankle.

Common Characteristics in Patients

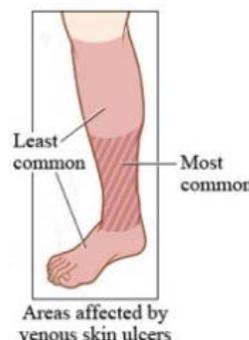
- Non-pitting brawny edema
- Hyperpigmentation (brown/black discoloration to the lower leg, aka Hemosiderin Deposits)
- Lipodermatosclerosis
- Minimal to no pain
- Peripheral pulses are palpable
- Capillary refill < 3seconds

Typical Wound Characteristics

- Color: ruddy, granulation present
- Depth: usually shallow
- Wound Margins: irregular
- Exudate: moderate to heavy
- Infection: less common



Examples of venous stasis ulcers (left and below)



Areas affected by venous skin ulcers



Lipodermatosclerosis

Treatments for Venous Stasis Ulcers

- **Optimize venous return** by elevating legs above heart level, discouraging sitting with legs crossed, discouraging standing for prolonged periods, exercising legs as tolerated.
- **Compression therapy** which may include multi-layered compression wraps and therapeutic support stockings. *Note: Arterial disease must be ruled out before applying compression therapy as ischemia and/or amputation could result.*
- **Topical Treatments (Heavy to Moderate Exudate)**
Calcium Alginate • Foam • Collagen • Honey Alginate
- **Topical Treatments (Light Exudate)**
Hydrogel • Honey Gauze • Collagen

Sources:
E. Gregory Thompson, MD, Doucette, Margaret, DO *Wound Care, Hyperbaric Medicine*, August 21, 2015.
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