

ABSTRACT: Presented at The Symposium on Advanced Wound Care (SAWC), Las Vegas, NV September 2014.

Diuretics Speed Wound Healing: Refractory wounds respond to diuretics and elastic compression when comorbid heart failure is present

Bob DeYoung, RN
Alegent Creighton Mercy Wound Care Center, Omaha, NE

Martin J. Winkler, MD, FACS
Alegent Creighton Mercy Wound Care Center, Omaha, NE

Problem

We have found Congestive heart failure (CHF) to be a significant wound comorbidity. CHF is difficult to diagnose in elderly wound patients who often stop taking the diuretic listed on their medicine sheet, increase salt intake, or have comorbid renal disease, that leads to swelling and at-risk skin failure.¹ By recent parlance, a wound is “refractory to healing” when it has not decreased in size by 40% after 4 weeks of treatment.² Although we understand the importance of practice limits, we are not cardiologists, we are no longer timid about ordering diuretics in noncompliant patients, encouraging salt restriction, and ordering elastic compression* to treat refractory wounds with comorbid CHF.³

This study asks two questions: (1) Is it safe/effective for wound practitioners to treat wounds with diuretics and sodium restriction, and (2) Is elastic compression effective to control periwound edema due to CHF?

Methods

A retrospective anecdotal case study of four wound patients with comorbid CHF and wounds refractory to 4 weeks of treatment were treated with diuretics and elastic compression therapy. Photographs document treatment details and wound healing.

Findings

Treating comorbid CHF with diuretics improved healing of refractory wounds without complication. All wounds healed. No adverse events related to wound clinic practitioners prescribing diuretics.

Summary

In a small anecdotal series, diagnosing and controlling comorbid CHF with diuretics, after 4 weeks of wound care appears, to speed healing of refractory wounds without complications. Elastic compression to control edema appears helpful.

Reference

1. Etiology of chronic leg ulcers in 31,619 patients in Germany analyzed by an expert survey. Körber A., Klode J., Journal der Deutschen Dermatologischen Gesellschaft, Volume 9, Issue 2, pages 116–121, February 2011

2. Neuropathic Diabetic Foot Ulcers. Boulton, A., Kirsner, R., N Engl J Med 2004; 351:48-55

3. Novel Four Layer Dressing Enhances Leg Ulcer Healing: Longitudinal Yarn Compression in Direct Contact with Wound Surface Delivers Effective Elastic Compression. Winkler, M., Wisnieski, L; Science Poster SAWC 2013
[//www.compressiondynamics.com/compress_links/Poster_EdemaWear_Four_Layer_Dressing_Enhances_Leg_Ulcer_Healing_2010.pdf](http://www.compressiondynamics.com/compress_links/Poster_EdemaWear_Four_Layer_Dressing_Enhances_Leg_Ulcer_Healing_2010.pdf)

* EdemaWear® brand fuzzy wales stockinet, Compression Dynamics LLC, Omaha NE 68102