The purpose of this case study is to evaluate and review the use of a collagen ECM dressing for the treatment of a recurrent venous ulcer (left, medial ankle) in a 52-year-old patient. The dressing used for patient care was formulated with a collagen extracellular matrix compound to address deficiencies in the skin surface and promote faster healing. The results demonstrate the efficacy of a collagen ECM dressing for recurrent venous ulcer.

Deficiencies in the extracellular matrix of the skin are common in recurrent and hard-to-heal wounds. Although compression therapy is the standard of treatment for venous ulcers, dressings which include ECM material provide a template for ordering cellular structure at the wound site. This template promotes and supports the natural ability of the body to effectively heal, resulting in complete wound resolution in a shorter amount of time. The product used for this case included a 90 percent collagen base with 10 percent ECM components.

The treatment for the treatment of the patient was selected based on the unique issues facing the patient. These include:

- Recurrent venous ulcer with initial venous ulcer requiring 100 days for healing.
- Compromised immune system due to uncontrolled diabetes.
- Comorbid health conditions impacting vascular health including: diabetes, hypertension and hyperlipidemia.

The collagen ECM dressing was utilized to help promote the body’s natural defenses to promote wound healing.

Case involves a 52-year-old male that was initially treated for a venous ulcer on the left, medial ankle between November 6, 2003 and February 9, 2004. Treatment included:

- Saline-based wound cleanser with a polyurethane foam with silver dressing.
- Expandable netting/gauze w/Unna Boot.

Patient lives at home with his wife is AAOx3, able to ambulate without assist and independent with all ADLs intact. Patient has a current history of hyperlipidemia, hypertension and type 2 diabetes. Current medications include: metformin, Lasix, smivastatin, losartan and Norvasc. Patient does not monitor blood glucose and denies alcohol, substance and tobacco use. Patient has a past history of C-3 fracture from a workplace accident which occurred in 1990.

Patient presented for treatment on August 5, 2013. At the time of admission to the wound care service, the patient had a three week-old venous ulcer. Initial measurements for the wound were: Length: (cm) 4.0, Width: (cm) 4.5, and Depth: (cm) 0.1. Treatment included:

- Application of primary dressing (collagen ECM) twice weekly or as needed.
- Application of secondary dressing (4x4 gauze).
- Expandable netting or gauze.

The case illustrates the benefits of using a collagen ECM dressing for the treatment of recurrent venous ulcers. Even with efforts in place to prevent venous ulcer recurrence, the condition is likely to re-develop. Initiating treatment with bandages that improve the extracellular matrix at the wound site may be a viable approach to reducing healing time for patients with this condition.

References:


