Retrospective Analysis of Chronic Wounds Healed with Dehydrated Human Amnion/Chorion Membrane Allografts in the VA Setting

Dr. Joseph Terebessy, DPM
El Paso VA Health Care System

Background

- Chronic non-healing wounds are a significant health care problem for patients, families and providers.
- Advanced wound therapies that promote rapid and complete healing, thus reducing the risk for infection and amputation, can substantially improve quality of life while decreasing financial burdens to the individual and health care system.

Dehydrated Human Amnion/Chorion Membrane (dHACM)

- PURION® Processed dehydrated human amnion/chorion membrane (dHACM) has been shown to contain growth factors that help in wound healing, including PDGF-AA, PDGF-BB, bFGF, TGF-β1, EGF, VEGF, and PlGF, as well as anti-inflammatory interleukins (IL-1ra, IL-4, IL-10), and TIMP-1, TIMP-2, TIMP-4, which help regulate the matrix metalloproteinase activity. ¹

- Results from in vitro and in vivo experiments established that dHACM contains factors capable of stimulating mesenchymal stem cell migration and recruitment.¹
- dHACM allografts have been shown to be an effective treatment for diabetic foot ulcers and venous leg ulcers.²⁻⁵

Purpose

- Our purpose is to present our experience with healing chronic wounds with dHACM allografts in the VA setting.

Methods

- We identified 70 patients in our clinic with chronic wounds (diabetic foot ulcers, venous leg ulcers or other non-healing wounds) healed with dHACM over a one year period.
- The decision to use dHACM was based on the VA algorithm on moving to advanced therapies after 4 weeks or initially to advanced therapies if patient was deemed high risk.
- Number of grafts used for healing, time to healing and cost to healing was calculated.
- Wound size appropriate grafts were applied weekly after debridement until complete epithelialization occurred.

Results

- Overall, 233 dHACM allografts were used to heal 70 wounds.²⁻⁵
- 65 (92.9%) of chronic wounds were <14 cm² and 5 wounds (7.1%) were extreme (size range of 14cm² to 32cm²).
- A total of 195 dHACM allografts were used in the 65 wounds <14 cm².
- In the extreme wound subgroup an average of 7.8 grafts were used and time to complete healing averaged 8 weeks.

Conclusion

- In our population, we believe dHACM to be both a clinically effective and cost effective wound treatment in patients with chronic wounds of varying etiology.

References