

Dehydrated Human Amnion/Chorion Membrane Allograft for the Treatment of Chronic Ulceration in the Diabetic Patient

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Background

- ❖ Chronic non-healing ulcers present a significant challenge for patients and health care providers.
- ❖ Human amniotic membrane has been used as a biological dressing for the treatment of various types of wounds for over a century.¹
- ❖ PURION® Processed dehydrated human amnion/chorion membrane (dHACM) has been shown to contain growth factors that help in wound healing.²
- ❖ PURION® Processed dHACM allografts are available in a variety of sizes and configurations to eliminate wastage and reduce total treatment costs.
- ❖ Clinical studies have shown that dHACM is a viable option for the treatment of diabetic foot ulcers.³

Purpose

To describe the use of dHACM allograft for the treatment of ulceration in a diabetic patient.

References

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2. Koob TJ, Rennert R, Zabek N, Masee M, Lim JJ, Temenoff JS, Li WW, Gurtner G. Biological properties of dehydrated human amnion/chorion composite graft; implications for chronic wound healing. Int. Wound J. 2013 Aug 1. Doi 10.1111/iwj.12140.
3. Zelen CM. An evaluation of healing with the use of dehydrated human amniotic membrane allograft in patients with chronic diabetic foot ulcers. J Wound care, 2013;22:347-351.

dHACM = EpiFix®, MiMedx Group, Inc., Marietta, GA
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Case History

Patient History

- ❖ 62 y/o male with a history of diabetes, neuropathy, peripheral arterial disease and prior amputations
- ❖ Nonsmoker
- ❖ Controlled A1c of 6.2
- ❖ Controlled HTN
- ❖ ABI 1.2 right LE and 1.4 left: calcifications noted in DP bilateral
- ❖ Grade II 2.0cm x 1.5cm x .3cm plantar ulcer left foot below prior 5th met
- ❖ Partial resection

Prior Treatment

- ❖ Patient is managed by a multi-disciplinary approach: Primary care is managing multiple medical conditions; Endocrinology is managing diabetes; Vascular performed prior bypass of LE bilaterally; Podiatry managed prior amputations, regular diabetic foot care, off loading, and diabetic shoe gear.
- ❖ Prior wound care included numerous modalities to address chronic ulceration below 5th MPJ including wide excision of ulcer after partial 5th ray amputation for osteomyelitis.
- ❖ Despite neg. biopsy the ulceration fails to heal.

dHACM Treatment

- ❖ Wound size appropriate dHACM allografts were applied weekly after debridement followed by standard dressings until complete epithelialization occurred.

Results

The wound was healed at 4 weeks after two weekly dHACM applications and remains intact.



Pre graft
3.0 cm x 2.0 cm x 3 mm



First dressing change after 1st graft
note: offloaded and minimal drainage



After removal of dressing
1.0 cm x 1.3 cm x 1 mm
excellent graft incorporation at 1 week

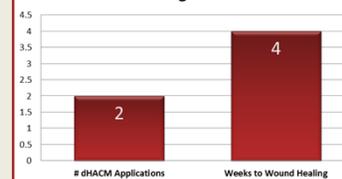


Week 2 after 2nd graft
and pre debridement
1.0 cm x 1.1 cm x .1 cm



Week 4 post debridement
.5 cm x .4 cm x .1 cm
excellent response to 2 graft applications

Healing Metrics



Conclusion

- ❖ Dehydrated human amnion/chorion membrane allograft offers a cost effective wound healing modality in diabetic wound closure.