

Dehydrated Human Amnion Chorion Membrane Allografts for Hard-to-Heal Wounds In The Post-Acute Care Setting

Martha Kelso¹; William Tettelbach^{2,3,4,5,6,7}; Allyn Forsyth^{6,8}

SAWC Spring 2023

INTRODUCTION

Post-acute care, which encompasses long-term hospitals, inpatient rehab facilities, home-based care, and skilled nursing facilities, is an often-underappreciated aspect of a patient's journey to recovery. Wound care provided in the post-acute care setting can often be the critical step in shaping a favorable outcome while avoiding penalties for typically preventable events (e.g., readmission within 30-days of discharge from the hospital). Patients with advanced age, multiple comorbidities and poor mobility are especially vulnerable and dependent on quality post-acute care. The restricted access to patient care in the hospital outpatient department (HOPD) setting that happened during the COVID-19 pandemic highlighted the need for access to expanded wound care sites of service outside of the HOPD setting. As a result, mobile wound care services are now gradually growing across the US. Here we describe the care provided to two complex patients using mobile onsite wound care. The use of fluorescent imaging, Dehydrated Human Amnion Chorion Membrane (DHACM)*, and the impact on wound size were all tracked using modern software, allowing for quality care and wound closure for challenging patients.

METHODS

A mobile onsite service** provided wound care to two patients with hard-to-heal wounds in the post-acute care setting. Patient treatments, wound characteristics, wound size, and the number of DHACM applications were tracked throughout the treatment episodes. Both stalled or hard-to-heal wounds had failed standard of care (SOC) alone, including debridement and graduated compression therapy when indicated. DHACM was initiated and appropriately applied at weekly to biweekly intervals until wound closure was observed.

RESULTS

Two elderly female subjects, each with multiple comorbidities were seen weekly for hard-to-heal wounds with different etiologies. A venous leg ulcer (VLU) on the lower left calf of subject one was closed in 5.5 months (Figure 1). A pressure injury ulcer in a diabetic located on the right heel of subject two was closed in 12 months (figure 2).

Author Affiliations
 1. Wound Care Plus, Blue Springs, MO; 2. Duke University School of Medicine, Department of Anesthesiology, Durham, NC; 3. American Professional Wound Care Association, LA; 4. Association for the Advancement of Wound Care, WI; 5. Western Peaks Specialty Hospital, UT; 6. MIMEDX Group, Inc., Marietta, GA; 7. HCA Healthcare, Mountain Division, Salt Lake City, UT; 8. Department of Biology, San Diego State University, San Diego, CA.
 Poster development supported by MIMEDX Group, Inc.

RESULTS

Figure 1.

Subject one was a 91-year-old female with a hard-to-heal left VLU that failed extended standard wound care therapy despite being treated in the inpatient and HOPD settings. Once her wound care was transferred to the post-acute care setting, mobile onsite service providers employed a combination of advanced treatments utilizing DHACM and SOC techniques, ultimately achieving the desired goal of complete wound closure. The patient received a total of twelve DHACM applications once the wound bed had been adequately prepared to receive the allografts.

Comorbidities:

- Chronic Venous insufficiency
- Deconditioning
- Emphysema
- Hypertension
- Osteoarthritis
- Peripheral vascular disease
- Polymyalgia rheumatica - requiring daily prednisone

Post-acute care Day 0 Post-acute care Day 28 Post-acute care Day 77



Post-acute care Day 98 Post-acute care Day 128 Post-acute care Day 156



RESULTS

Figure 2.

Subject two was an 83-year-old diabetic female with a hospital-acquired right heel unstageable pressure injury ulcer that failed SOC therapy. Her wound care was transferred to the post-acute care setting, where mobile onsite service providers employed a combination of DHACM and SOC techniques leading to complete wound closure. The patient received a total of seven DHACM applications once the wound bed had been adequately prepared to receive the allografts.

Comorbidities:

- Atherosclerotic heart disease
- Chronic kidney disease, stage 3
- Diabetes mellitus, type 2
- Deconditioning
- Dementia
- Hypertension
- Spinal stenosis
- Spondylosis

Post-acute care Day 0 Post-acute care Day 99 Post-acute care Day 176



Post-acute care Day 232 Post-acute care Day 365



CONCLUSION

Advanced age, low mobility, and multiple comorbidities are common in the post-acute care settings. When such patients are discharged from the hospital with hard-to-heal wounds, they are often at a greater risk for infection, amputation, and an increased mortality rate.^{1,2} Here we demonstrate how the closure of hard-to-heal wounds can be achieved with post-acute care management that integrates the use of DHACM into the post-acute care treatment algorithm.

References

1. Armstrong DG, Sverdlow MA, Armstrong AA, Conte MS, Padula WV, Bus SA. Five year mortality and direct costs of care for people with diabetic foot complications are comparable to cancer. J Foot Ankle Res. 2020;13(1):16. Published 2020 Mar 24. doi:10.1186/s13047-020-00383-2.
2. Lavery LA, Armstrong DG, Wandersich RP, Mohler NJ, Wensel CS, Ulsky BA. Risk factors for foot infections in individuals with diabetes. Diabetes Care. 2006;29(6):1288-1293. doi:10.2337/dc05-2425.

*DHACM = EPIPIX (MIMEDX Group, Inc, Marietta, GA, US) **Mobile onsite service = Wound Care Plus, LLC, Blue Springs, MO, US