Treatment of Chronic, Complicated Wounds with a Novel Ovine Forestomach Matrix and Hyaluronic Acid Composite Graft: A Real-World Experience

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Objective

To evaluate real-world outcomes of complicated, hard-to-heal wounds of varying etiologies in a single rural wound care center using a novel cellular/tissue-based product (CTP) made from sheep tissue.

Introduction

- In 2020, the burden of chronic wounds impacted the quality of life of approximately 2.5% of the general United States population and continues to climb[1].
- Chronic wounds include those that are unresponsive to appropriate initial therapy or remain persistent for greater than 3 months in the face of appropriate additional care.
- Chronic wounds are associated with significant morbidity and mortality, and they represent a major medical and financial burden[1]
- The investigators of this study used a novel extracellular matrix-hyaluronic acid (OFM-HA*) graft in significantly compromised wounds with challenging patients with notable physical, social, and economic issues commonly encountered in rural areas.
- The product is a cellular and/or tissue-based product (CTP) combining an established extracellular matrix derived from ovine forestomach (OFM) and benefit of hyaluronic acid.
- This combination of OFM and HA is believed to facilitate moisture balance and support cellular infiltration and migration to drive improve wound healing trajectory.

Methods

- This retrospective case series was from a single rural wound care center evaluating eleven wounds (n=11) across ten patients with various hard-to-heal wound types who received at least one application of OFM-HA graft from April 2023 to February 2024.
- Wound measurements were obtained at each visit and used to calculate percent area reduction (PAR) for the wounds and clinical examination to evaluate wound improvement.
- All data were gathered retrospectively, exclusively through data found in electronic medical records.

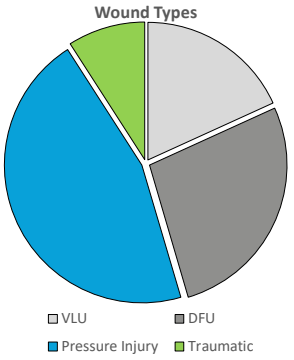
Study Participant and Wound Demographics

N = 11 Wounds
N = 10 Participants

56
Average Participant Age (years)

4.3
Average Comorbidity Count per Participant

Comorbidity	Proportion of Participants
Diabetes	7/10
Vascular Disease	8/10
Paralysis	3/10
Smoker	4/10
Anti-Coagulation	3/10
Kidney Disease	2/10



Results

77.6%
Average Percent Area Reduction by Visit 13

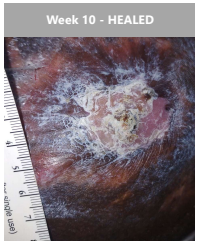
10/11
Proportion of Wounds to Respond to OFM-HA treatment (at least 63% PAR)

7/11
Proportion of Wound to Achieve at least 85% PAR

3.7
Average # of OFM-HA Applications

Case Example

Participant 6: 26-year-old male with paraplegia, tobacco use, malnutrition, multiple concurrent pressure injuries, chronic osteomyelitis presents with left hip wound persisting for 1.5 years (84 weeks). Healed with 5 applications of OFM-HA, offloading



Conclusion

- Real world patients served by rural wound care centers are especially challenging due to significant co-morbidities, wound chronicity, social, and economic constraints which can impact compliance, access to advanced treatments, and ultimate outcomes
- This small retrospective study suggests that OFM-HA offers a good treatment option to improve wound healing trajectory in especially challenging patient populations with hard-to-heal wounds where other treatment options have exhausted or inaccessible due to cost.

References and Disclosures

*OFM-HA = Symphony™, Aroa Biosurgery, LTD, Auckland, NZ
[1]Sen CK. Human Wound and Its Burden: Updated 2020 Compendium of Estimates. Adv Wound Care (New Rochelle). 2021 May;10(5):281-292. doi: 10.1089/wound.2021.0026. PMID: 33733885; PMCID: PMC8024242. TW and KTT have a consulting agreement with Aroa Biosurgery