

CASE SERIES: THE TREATMENT OF CHRONIC PRESSURE ULCERS WITH A HUMAN KERATIN MATRIX

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Background

More than 2.5 million people in the United States develop pressure injuries annually¹. Approximately 60,000 patients die as a direct result of pressure ulcers. The annual cost of to manage pressure injuries among Medicare beneficiaries alone is estimated to be \$22 billion². Moreover, more than 17,000 lawsuits related to pressure ulcers are filed annually, second only to claims of wrongful death³.

Novel and effective therapies that drive down wound healing time are essential parts of the toolkit of clinicians when standard-of-care is unable to resolve hard-to-heal chronic pressure injuries.

METHODS

We performed an observational case series assessment on pressure ulcers in the long-term care setting (nursing home). Each patient was observed to have multiple co-morbidities, poor wound healing, and failure to heal under standard-of-care (SOC) under the care of certified advanced practice wound care specialists. These patients received consideration of alternative therapies to facilitate healing.

Three patients were treated with ProgenaMatrix®, a novel and unique human keratin matrix (HKM) product. ProgenaMatrix® acts on wounds that are stalled in the inflammatory phase by activating suppressed keratinocytes, thus causing epithelization via cellular migration and upregulation of basement membrane protein. Moreover, this keratin biomaterial promotes the creation of anti-inflammatory M2 macrophages and improves phagocytosis.

Patient demographics, past medical and surgical history, and anatomical pathology were articulated. Evaluation of wound closure progress was monitored via data collected from EHR database. Measurement of wound progress was further corroborated via digital photography, and/or near-infrared spectroscopy imaging.

CASES

CASE 1: 95-YEAR-OLD MALE

Type 2 Diabetes Mellitus, GERD

Pressure Wound of the Left Heel

Wound Age: 31 weeks

Wound Measurements: 1.7cm² x 1cm² x 0.1cm²

Prior Treatment Protocol: Standard of Care

Date Progenamatrix Started: 5/25/2023



CASE 2: 66-YEAR-OLD MALE

Stage 4 Pressure Injury of the Right Ischium

Wound Age: 15 weeks

Wound Measurements: 1cm² x 4cm² x 0.5cm²

Prior Treatment Protocol: Standard of Care

Date Progenamatrix Started: 5/10/2023

Week 1	Week 5	Week 6	Week 8	Week 9
	(A)		W023	
4 cm ²	2.1 cm ²	1.2 cm ²	0.48 cm ²	0.35 cm ²

CASE 3: 83-YEAR-OLD-FEMALE

Stage 4 Pressure Injury of Thoracic Spine

Wound Age: 20 weeks

Wound Measurements: 1.5cm² x 2cm² x 1.1cm²

Prior Treatment Protocol: Standard of Care

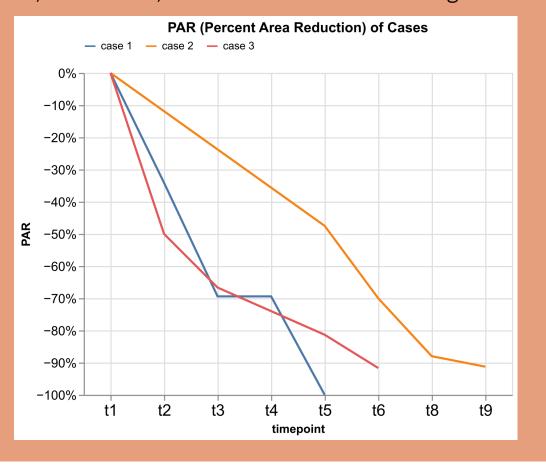
Date Progenamatrix Started: 5/10/2023



Weekly applications? Number of applications?

RESULTS

Wound PAR among the cohort of three patients, who all had full-thickness pressure injuries [(stage 3 or stage 4), was 100%, 91.2%, and 91.6% respectively, over a 5-to-9-week period. This represents a successful outcome for patients who present with multiple comorbidities, failed SOC, and wounds whose healing has stalled.



CONCLUSION

All patients experienced accelerated healing and significant wound area reduction with ProgenaMatrix®, despite significant comorbidities, and a history of poor wound healing.

Each marginal day of stalled wound-healing in pressure injuries not only results in an increased risk of morbidity and mortality, but also increased financial costs and medico—legal risks.

These results suggest that ProgenaMatrix®, may be an effective and cost-effective modality in the treatment of chronic pressure ulcers which have failed Standard of Care.

Reference

- 1. Reddy M, Gill SS, Kalkar SR, Wu W, Anderson PJ, Rochon PA. Treatment of pressure ulcers: a systematic review. JAMA. 2008;300(22):2647-2662.
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 3. Agency for Healthcare Research and Quality, Rockville, MD. https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressureulcer/tool/pu1.html