Case Study Report

MicroMatrix® and Cytal® Wound Matrix 6-Layer devices facilitate closure of severe scalp degloving wound

Age: 27  Sex: Male

ACell Product(s) Used: MicroMatrix and Cytal Wound Matrix 6-Layer.

Outcome: Following management with MicroMatrix and Cytal Wound Matrix, patient was discharged at 23 hours and wound closed on post-op day 48. The patient was not readmitted.

Management of Wound

The wound was cleaned and MicroMatrix and Cytal Wound Matrix 6-layer devices were applied bedside. No operative intervention was conducted. The wound was dressed with a non-adherent dressing, hydrogel, a bulky gauze bandage, and an occlusive outer layer. Patient was discharged at 23 hours.

Clinical Presentation and Case Background

A 27-year-old male patient presented with a full-thickness degloving wound to the forehead following an unrestrained motor vehicle accident. The injury measured approximately 72 cm². The patient was triaged at a community hospital and subsequently transferred to a Level 1 trauma center for management. At the time of admission, the patient tested positive for cannabinoids and cocaine.

Figure 1. Patient presents with 8 cm x 9 cm full-thickness wound of the forehead and scalp following a motor vehicle accident.

Figure 2. Wound is managed with 500 mg of MicroMatrix and one 7 cm x 10 cm Cytal Wound Matrix 6-Layer device.

Figure 3. Post-application Day 20.
Outcome of Management and Follow-up
Following discharge, the dressings were retained until the first patient follow-up visit at day 20. Neither home healthcare nor concomitant wound therapies (e.g., Negative Pressure Wound Therapy) were utilized. Without further ACell product usage or autologous skin grafting, the patient went on to achieve full wound closure by day 48.

Why this Patient was a Candidate for ACell Product
Upon assessment by the treating physician, it was determined that a rotational flap, free flap, or negative pressure therapy may be too invasive for wound management due to location of injury. Application of ACell wound products allowed the treating physician to manage the wound bedside with minimal follow-up required.

ACell Product Summary
500 mg of MicroMatrix and one 7 cm x 10 cm Cytal Wound Matrix 6-Layer device were applied to cover the full-thickness wound following a light, non-operative debridement. There were no subsequent applications of ACell wound products.

Source
This case was managed by Catherine Ronaghan, MD, at University Medical Center in Lubbock, Texas, USA. Dr. Ronaghan is a board certified general surgeon and surgical oncologist.