

# Treatment of Post-Traumatic, Fracture Blister Necrosis and Morel-Lavallée Lesion-related Wounds

## Using Ultra-Thick, Cryopreserved Human Amniotic Membrane Allograft

Christopher Stewart, MD.<sup>1</sup>

<sup>1</sup>Baptist Health Medical Center, Orthopaedic Trauma Surgeon, Little Rock, AR

### Introduction

Traumatic fractures are frequently accompanied by extensive soft-tissue damage due to high-energy trauma, which can result in a number of significant complications, including soft tissue loss, deep infection, pain, and even amputation.<sup>1,2</sup> While a number of treatment modalities have been described in the literature for post-traumatic wounds, there is no standardized treatment protocol for their management. In recent years, ultra-thick, cryopreserved human amniotic membrane has been increasingly used to accelerate the healing of wounds due to its anti-inflammatory properties.<sup>3-5</sup>

### Methods

To describe a case report of a patient who was treated with ultra-thick, cryopreserved human amniotic membrane (AM) allograft<sub>†</sub> for post-traumatic wounds related to fracture blister necrosis and a Morel-Lavallée lesion.

†Neox<sup>®</sup> 1K, BioTissue Holdings Inc, Miami, FL

### Results

A 78-year-old female (non-smoker) with type II diabetes mellitus presented with multiple traumatic injuries including a broken radius and ulna, the latter of which were treated with open reduction and internal fixation. Three weeks later, the patient presented with large blister wounds with eschar on the forearm (FIG. 1A) and thigh. The wounds were debrided (FIG 1B), and a split-thickness skin graft was applied on the thigh wound.

AM allograft<sub>†</sub> was applied at the base of the wound on the forearm, which was deeper than the thigh wound (FIG. 1C). At week 3, the AM grafts were still visible in the wound bed (FIG 1D), with notable granulation tissue formation noted at week 5 (FIG. 1E). Progressive epithelialization was noted on the forearm at 8 weeks (FIG 1F) and 10 weeks (FIG. 1G), with complete epithelialization observed at 21 weeks (FIG. 1H).

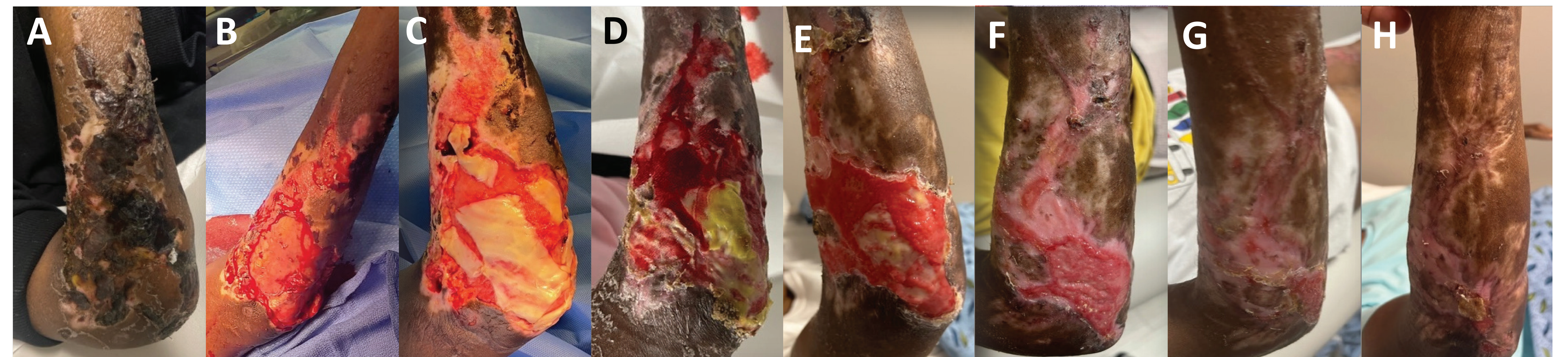


FIG. 1 Wound Healing of a Forearm Blister Wound.

### Conclusion

Use of ultra-thick, cryopreserved human amniotic membrane allograft<sub>†</sub> can aid in wound closure for post-traumatic, full-thickness wounds.

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