

Healing a Difficult-to-Treat Diabetic Foot Ulcer Using a Tri-Layer Human Amniotic Tissue Graft

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Background

66-year-old male with uncontrolled type II diabetes mellitus
Comorbidities: peripheral neuropathy, peripheral vascular disease, CKD stage 3b
Presented with traumatic Wagner grade 2 diabetic foot ulcer

Clinical Course

05/21/2025: Initial rupture of plantar bulla with tissue necrosis
06/25/2025: Partial 5th ray resection performed
Subsequent
08/04/2025: 4th digit necrosis requiring amputation

Treatment

Local wound care and dry dressings
Off-loading with total contact cast
After >30 days non-healing → Amnion-Chorion-Amnion (ACA) graft initiated on 09/30/2025

Outcome

Post-amputation wound: 9 × 5 × 0.4 cm (45 cm²)
Initial ACA application: 4.3 × 8 × 0.2 cm (34.4 cm²)
Most recent wound: 3.7 × 4 × 0.2 cm (14.8 cm²)

Wound Progression

83.6% reduction in size over 10 weeks!



Amnion-chorion biologic grafts provide regenerative and anti-inflammatory properties. This case demonstrates improved healing progression in a complex diabetic foot ulcer.