DEHYDRATED HUMAN AMNIOTIC MEMBRANE ALLOGRAFT FOR WOUND CLOSURE AND MINIMIZING ADVANCED WOUND CARE COSTS

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BACKGROUND

26 y/o male with right lower extremity surgical dehisced wound. First seen in our clinic on 4/16/14. Very complex medical and surgical history related to Ewing sarcoma right lower extremity requiring excision and reconstruction of his tibia with free fibula from the contralateral side. His chart was reviewed and his surgical history goes back to 12/2013. Most recently on 4/2/14 he was taken back to the OR and had to undergo debridement of wound on left lower extremity including revisions with a new flap. This was due to a penetrating injury to the left lower extremity with thigh fracture and severe ischemia. His leg was placed in a cast for immobilization post-op. His left leg was placed in a cast for immobilization post-op. Cast was removed prior to his being seen in wound clinic. He had an area of exposed tendon at the flap donor site. He had an area of exposed tendon at the flap donor site. An anterior leg cast and side graft was noted with no evidence of wound infection with soap and water in each visit.

T&V in wound clinic: immobilizing boot for leg, NPWT with hydrogel/collagen, Serial debridement including part of devitalized tendon.


RESULTS

31 y/o female with PMH: DVT, HTN, DM; chronic phlebitis therapy for ulcers. Followed by bacterial and fungal infection and cellulitis. This disease treated with 61 days of hyperbaric oxygen treatment (HBOT) and course of IV antibiotics. This disease developed for about 1 year prior to coming to our clinic (HBOT, 6/14/14 and underwent extensive course of HBOT over several months). At time of initial presentation, he was under care of Hemodialysis, FSHD and DM.

Vascular exam: Palpable pedal pulses. Normal color and temperature, normal capillary refill. Severe hallux valgus deformity on right with ulceration to dorsal aspect of forefoot over deformity.

Non-invasive vascular studies: Normal TCPO2 to forefoot > 60, ABI 1.18 on right non-compressible on left.

Conservative local Tx was attempted with moist wound dressings, including initially antibacterial dressings followed by collagen dressings including trial of Hexiaplast. Once wound was clean from any devitalized tissue it was noted that 50% of surface had exposed capsule. NPWT was attempted to achieve granulation over capsule. Not successful after 2-3 weeks.

9/25/14, 10/8/14, 10/23/14, 11/6/14. After 2nd application slight granulation over capsule was noted. After 3rd application area 4 cm x 3 cm with 50% granulation and 50% fibrin/slough. DAMA Applications: 3/25/14, 4/13/14, 5/12/14, 11/4/14. After 2 application night granulation over capsule was noted. After 3rd application area of exposed capsule was smaller with 50% granularity and 50% exposed capsule. This patient did not achieve complete closure by well of study period owing to many cutaneous conditions, but did show significant reduction in the size of exposed capsule being covered with granulation tissue.

CONCLUSIONS

Some studies have noted that the clinical effectiveness of DAMA for pressure ulcers, it has been associated with improved granulation and wound bed health. It has been associated with improved granulation and wound bed health. DAMA has been shown to reduce the frequency of bacterial colonization and biofilm formation, which is associated with improved granulation and wound bed health. DAMA has been shown to reduce the frequency of bacterial colonization and biofilm formation, which is associated with improved granulation and wound bed health.

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