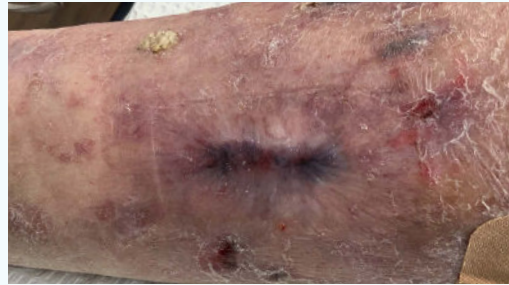


The Use of Fenestrated Dehydrated Complete Human Placental Membrane Allografts in a Dermatologic Excision Defect

AS DESCRIBED BY DR. RYAN AHERN, MD | COLLEGE STATION, TX



Initial Wound with dCHPM applied



Wound Resolution

PATIENT BACKGROUND & INITIAL APPLICATION

An 86-year-old male with diabetes and a history of numerous skin cancers was referred for treatment of a squamous cell carcinoma located on the distal lateral pretibial region. The initial size of the ulceration was 4.5 cm x 4.5 cm. Due to the large size of the ulceration, the physician determined a large excision with 1 cm margins to be the appropriate technique for removing the tumor.

The initial excision defect measured 5.8 cm x 5.3 cm. The physician performed a partial reconstruction of the defect using the purse-string technique. This technique is primarily utilized to reduce the size of circular or oval defects commonly associated with cutaneous tumor excision. Following this partial reconstruction, a fenestrated dehydrated complete human placental membrane (dCHPM) allograft was applied to the remaining defect (Figure 1). The physician utilized 16 cm² of fenestrated dCHPM allograft and dressed the wound with a contact layer and non-adherent dressing pad.



Figure 1. Day 0. Post-application of fenestrated dCHPM following partial reconstruction.

SECOND APPLICATION

The patient returned seven days later for a second application of a fenestrated dCHPM allograft. The physician cleaned the area and removed the sutures from the purse-string reconstruction (Figure 2). The wound was debrided, and the physician applied another 16 cm² of fenestrated dCHPM to the wound bed. The allograft was followed by topical antibiotic ointment, a contact layer, and a non-adherent dressing pad. The patient returned three days later for a bandage change when healthy granulation tissue was noted. The wound was dressed with petroleum, a contact layer, and a non-adherent dressing pad.



Figure 2. Day 7. Wound pre-debridement.

THIRD APPLICATION

Seven days after the second application, the patient returned for a wound evaluation. The patient reported some soreness around the wound, and a slight odor was noted. The physician cleaned the wound (Figure 3), and an additional 16 cm² of fenestrated dCHPM allograft was applied followed by topical antibiotic ointment, a contact layer, and a non-adherent dressing. The patient returned three days later (day 17) for a bandage change utilizing the same protocol as on day 14. No significant changes in the wound were noted at this appointment.



Figure 3. Day 14. Wound pre-debridement.

FOLLOW UP APPOINTMENTS

Nine days after the third application, the physician reported that the wound was progressing well. Healthy granulation tissue was established throughout the wound bed (Figure 4), and it was determined that no further applications of fenestrated dCHPM allografts were required. The patient was instructed to return in two weeks for standard wound care follow up.

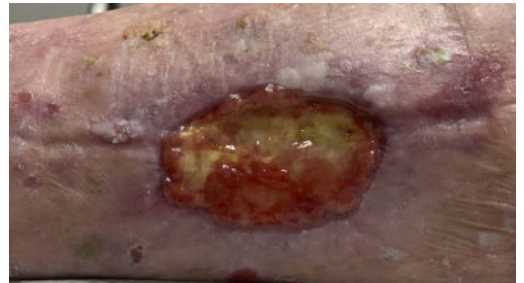


Figure 4. Day 23. Healthy granulation tissue after 3 applications of fenestrated dCHPM.

The patient returned for three more follow up appointments prior to wound resolution, at which no allografts were applied. On day 36, raised granulation tissue was noted, removed with a curette, and then cauterized using silver nitrate. A topical antibiotic ointment, contact layer, and non-adherent dressing pad were applied to the wound. The patient was instructed to change the bandage and apply antibiotic ointment daily between visits. On day 57, a notable decrease in wound size was reported, and the wound bed had red granulation tissue (Figure 5a). The wound was debrided using a curette and cauterized with silver nitrate prior to dressings being applied. At the next two follow up appointments on day 78 (Figure 5b) and 97, this process was repeated. Wound size continued to decrease between each appointment; overall, the wound bed was reported to look healthy.

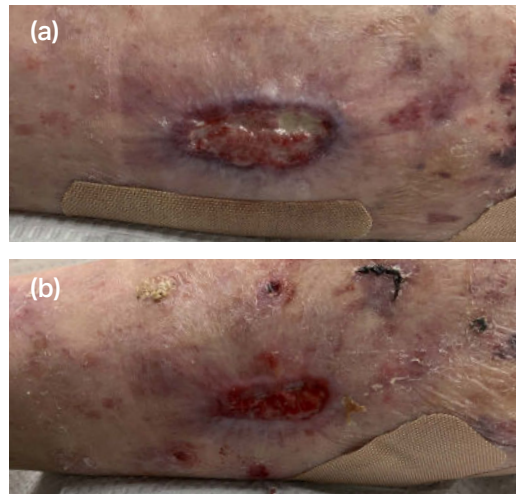


Figure 5. (a) Day 57. (b) Day 78.

WOUND RESOLUTION

On day 112, the patient returned for the final follow up visit. The physician noted the "site look[ed] great" (Figure 6). The patient was discharged and requested to continue skin checks with the referring provider.

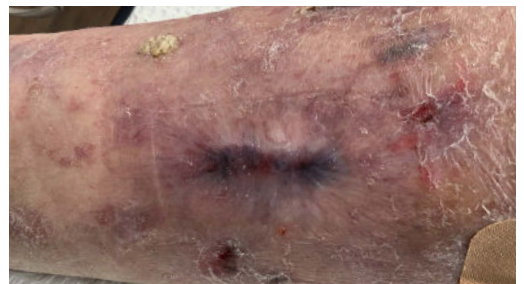


Figure 6. Day 112.