

The Use of Fenestrated Dehydrated Complete Human Placental Membrane (dCHPM) Allografts in a Mohs Defect on the Small Finger Proximal Interphalangeal Joint

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PATIENT BACKGROUND & INITIAL APPLICATION

An 89-year-old female with a history of basal and squamous cell carcinomas presented with a squamous cell carcinoma on her left small finger proximal interphalangeal joint. The tumor measured 1.8 cm x 0.9 cm. It was complicated by the poorly defined clinical tumor borders and risk of recurrence (Figure 1). It was determined that Mohs Micrographic Surgery was the optimal technique for removing the tumor.

After three stages of Mohs surgery, the defect extended into the deep subcutaneous tissue, almost down to the level of the paratenon, measuring 2.6 cm x 1.4 cm (Figure 2). The tissue surrounding the defect was inelastic and limited, so primary repair would be challenging and at risk of wound dehiscence. Skin substitutes were deemed the most appropriate treatment due to the wound characteristics, and fenestrated dCHPM allografts were chosen as a wound covering while the wound was left to granulate.

Prior to allograft application, the defect margins were debeveled using a #15c scalpel blade. A 4 x 4 cm fenestrated dCHPM allograft was trimmed to fit the wound. The remaining pieces were layered into the wound bed to fill the remaining defect. The allograft was covered with a pressure dressing and occlusive outer dressing.

SECOND APPLICATION

The patient returned 8 days later, and the wound measured 2.4 cm x 1.2 cm. Increased granulation tissue was noted. The defect was cleaned, and the margins were debeveled with a #15c scalpel blade. A fenestrated dCHPM allograft was trimmed to size and applied to the wound bed. The remaining pieces were layered into the wound bed until all the product was used. The allograft was rehydrated in the wound utilizing sterile saline. Following the allograft rehydration, a pressure dressing was applied.

FINAL WOUND VISIT

Seven days later, the patient returned for a wound check. The defect was well granulated, and it was determined that no further applications of fenestrated dCHPM were required. The defect was debrided, and an antibacterial ointment was applied to the wound. The wound was then dressed, and the patient was instructed on general at-home wound care.

8 MONTHS POST-MOHS PROCEDURE

The patient returned 8 months after the initial Mohs procedure for a standard skin check. At this appointment the surgical site was noted to have remodeled well (Figure 3).



Figure 1. Squamous cell carcinoma prior to Mohs procedure.



Figure 2. Day 0. The resulting defect from the Mohs procedure.



Figure 3. 8 months post-Mohs procedure during a routine skin check.