

# Use of a Dehydrated Amnion/Chorion Membrane Improves Lower Leg Surgical Wound Healing: A Four-Case Series



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## BACKGROUND

Distal lower-extremity Mohs defects left to heal by secondary intention re-epithelialize slowly and carry elevated risk of hypergranulation, pain, bioburden, and prolonged wound care.

Biologic matrices such as dehydrated amnion/chorion membrane (dHACM) may modulate inflammation and provide an extracellular scaffold; however, practical guidance on pairing dHACM with secondary intention in this anatomic context remains limited.

## OBJECTIVE

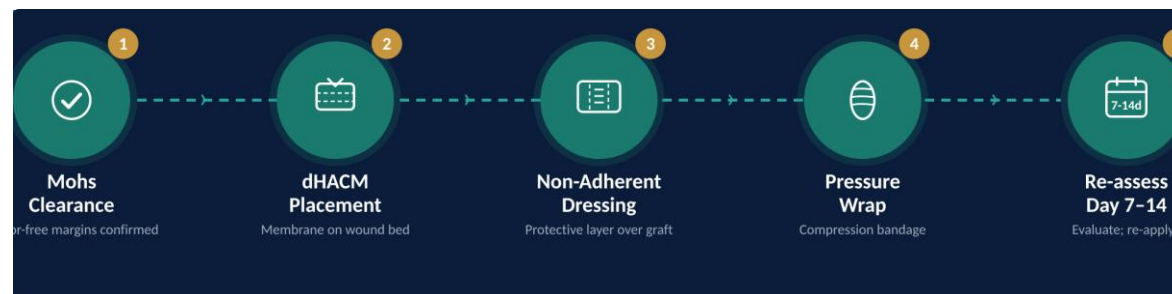
To describe operative techniques, sizing strategies, dressing protocols, and early healing outcomes when dHACM is applied intraoperatively to lower-leg Mohs defects managed by secondary intention.

## METHODS

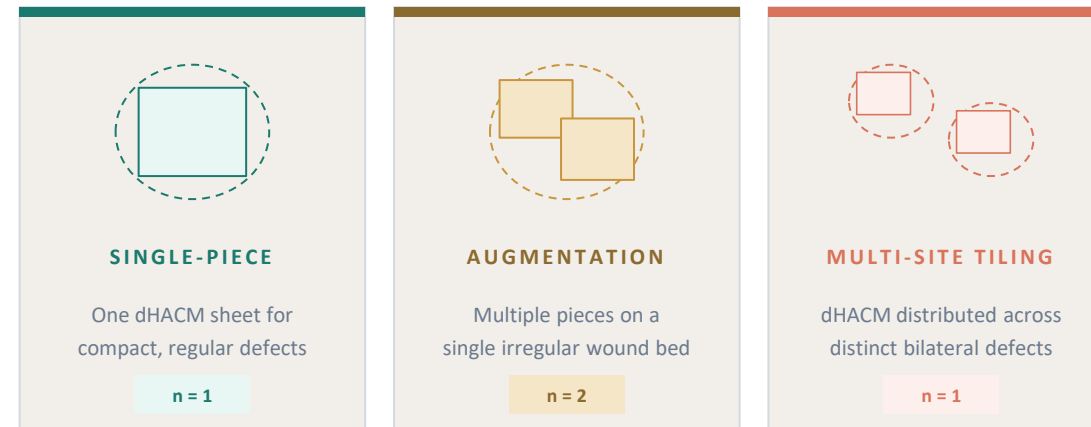
Retrospective case series at a single dermatologic surgery clinic. Procedural and follow-up documentation was abstracted for four consecutive lower-leg Mohs defects managed by secondary intention with adjunct dHACM.

Variables collected: histology, anatomic site, dHACM piece count and dimensions (cm/cm<sup>2</sup>), aggregate surface area, dressings, antibiotics/analgesics, adjunct wound therapies, early healing descriptors, and plans for re-application.

All cases de-identified; no patient-identifying information included.



## APPLICATION TECHNIQUES



## CASE SUMMARY

CASE	HISTOLOGY	SITE	dHACM STRATEGY	AREA
1	Cutaneous SCC	Lower leg	Single-piece	~2 cm <sup>2</sup>
2	Cutaneous SCC	Lower leg	Augmentation	~7.6 cm <sup>2</sup>
3	Cutaneous SCC	Lower leg	Augmentation	~28 cm <sup>2</sup>
4	Cutaneous SCC	Bilateral shins	Multi-site tiling	~50 cm <sup>2</sup>



## ADVERSE EVENT MANAGEMENT

Hypergranulation observed only in multi-site tiling case (Case 4, ~50 cm<sup>2</sup>). Successfully treated with silver nitrate and brief-course mid-potency topical corticosteroid.

## RESULTS

All four lower-leg Mohs wounds received intraoperative dHACM placement beneath nonadherent pressure dressings.

Early follow-up across all cases documented wounds healing well without evidence of infection or other early complications.

One chart explicitly documented no antibiotic use; analgesia was offered as needed. Several operative notes prespecified consideration of dHACM re-application at approximately 7–14 days based on clinical progress.

## KEY FINDINGS

### PRINCIPAL OBSERVATIONS

- dHACM + secondary intention was feasible across defect sizes ranging from 2 cm<sup>2</sup> to ~50 cm<sup>2</sup>
- Three reproducible sizing techniques emerged: single-piece, augmentation, and multi-site tiling
- Smooth early courses with no infections across all cases; hypergranulation in one case was easily managed
- A day 7–14 re-assessment decision point offers a simple protocol anchor for re-application

## CONCLUSIONS

Pairing dHACM with secondary intention after lower-leg Mohs surgery was feasible across diverse defect sizes, with smooth early healing courses and manageable hypergranulation.

These cases provide actionable operational details such as sizing strategies, dressing workflow, and a re-application decision framework — that can inform protocolized use and prospective evaluation of time to epithelialization, infection rates, pain, dressing burden, and cost-effectiveness.