## PP-12

# 수정된 C–V 피판 유두재건에서 하이브리드 진피와 무세포 진피기질(ADM) 코어 지지대의 임상결과 비교

# (Outcomes of Hybrid Dermis versus Acellular Dermal Matrix Core Struts in Modified C–V Flap Nipple Reconstruction)

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**Purpose:** Maintaining nipple projection and minimizing wound complications remain challenging after breast reconstruction, particularly in scarred or poorly vascularized tissues. We compared a hybrid dermis core strut (de-epithelialized autologous dermis plus acellular dermal matrix [ADM]) with an ADM-only core strut.

**Methods:** We retrospectively reviewed 90 nipple reconstructions performed between April 2019 and February 2026 using a modified C–V flap and ADM. Group 1 (hybrid, n=55) used a de-epithelialized tip of the lateral V flaps combined with ADM (Fig. 1). Group 2 (ADM-only, n=35) used stacked ADM (four layers) (Fig. 2). Outcomes were delayed healing (dressing >2 weeks), skin necrosis requiring revision, and 1-year projection loss (projection gap). Fisher's exact test and Welch's t-test were used.

**Results:** Delayed healing occurred in 11/55 cases (20.0%) in Group 1 and 0/35 (0.0%) in Group 2 (p=0.0056). Skin necrosis requiring revision occurred in 5/55 cases (9.1%) in Group 1 and 1/35 case (2.9%) in Group 2 (p=0.40). Mean projection gap at 1 year was 4.5±2.1 mm in Group 1 and 4.0±2.0 mm in Group 2 (p=0.26), corresponding to mean projection decreases of 40.9% (from 11.0 to 6.5 mm) in Group 1 and 34.8% (from 11.5 to 7.5 mm) in Group 2 (Table).

**Conclusion:** ADM-only achieved comparable 1-year nipple projection to the hybrid technique while significantly reducing delayed wound healing. If de-epithelialized autologous dermis is incorporated, meticulous technique and careful flap design are required.

Fig. 1. Photograph demonstrating hybrid dermis core strut using a de-epithelialized tip of the lateral V flaps combined with ADM as the core strut.

Fig. 2. Photograph demonstrating ADM-only core strut using stacked ADM (four layers) as the core strut.

| Outcome | Group 1 (Hybrid) (n=55) | Group 2 (ADM-only) (n=35) | *p*-value |
|---|---|---|---|
| delayed healing (dressing required >2 weeks) | 11/55 (20.0%) | 0/35 (0.0%) | 0.056 |
| skin necrosis requiring revision | 5/55 (9.1%) | 1/35 (2.9%) | 0.40 |
| Projection gap at 1 year (mm) (mean ± SD) | 4.5 ± 2.1 | 4.0 ± 2.0 | 0.26 |

Table. Outcomes of Nipple Reconstruction Using Hybrid Dermis vs ADM-only Core Struts