

Effect of autologous platelet adhesives on dermal fat graft resorption following reconstruction of a superficial parotidectomy defect: a double-blinded prospective trial.

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Abstract:

BACKGROUND: Dermal fat grafts are used to reconstruct facial contour defects but may undergo variable resorption. Application of autologous platelet adhesive may improve outcomes. The primary objective was to compare resorption of dermal fat grafts for parotidectomy defects, between patients receiving autologous platelet adhesive versus controls.

METHODS: This was a double-blinded prospective cohort at a tertiary care center. Volumetric analyses of dermal fat graft measured by MRI scans. Resorption was determined by comparing 1- and 6-month MRIs in each patient. Complications, Frey's Syndrome, and patient satisfaction were also assessed.

RESULTS: Twelve patients completed the study. A significant reduction in graft resorption was seen in the treatment group (57% vs. 31%, $p = .01$). Three patients in the control group developed fat liquefaction. Patient perceived significant differences in scar and contour.

CONCLUSION: Application of autologous platelet adhesives improved graft viability and patient satisfaction at 6 months.