

Use of tissue sealants in face-lifts: a metaanalysis.

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Abstract:

BACKGROUND: This review sought to determine the efficacy of tissue sealants such as fibrin tissue adhesives and platelet-rich plasma in reducing postoperative drainage, ecchymosis, and edema after face-lift surgery.

METHODS: The electronic databases MEDLINE (1966-May 2007) and EMBASE (1974-May 2007) and the Cochrane Central Register of Controlled Trials (CENTRAL) were searched for human studies, randomized controlled trials, controlled clinical trials, metaanalyses, and reviews of randomized controlled trials using the key words "fibrin tissue adhesive," "tissue sealant," "platelet-rich plasma," "face-lift," "rhytidoplasty," "rhytidectomy," and "facial plastic surgery." The search yielded 10 articles, only 3 of which met our inclusion criteria. The three studies were within-patient comparisons (patients acted as their own controls).

RESULTS: Although not statistically significant, the pooled results showed a strong trend toward reduction in postoperative drainage at 24 h and ecchymosis with the use of tissue sealants compared with the control arm of the study. No difference in outcomes was observed between the tissue sealant and control arms of the study in terms of postoperative edema measurement.

CONCLUSION: There was no statistically significant benefit from the use of tissue sealants in face-lift surgery. However, tissue sealants may be useful for patients at a high risk for hematoma and ecchymosis formation.