

A systematic examination of the effect of tissue glues on rhytidectomy complications. [Review]

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Abstract:

BACKGROUND: Fibrin glue has widespread use in multiple fields of surgery. There have been numerous studies on the use of fibrin glue in facelifts, with no consensus regarding differences in outcomes.

OBJECTIVES: This study compared the risk of hematoma, seroma, and the 24-hour drainage volume in all published prospective controlled trials.

METHODS: A MEDLINE search of English-language articles on fibrin glue and rhytidectomy published up to July 2013 yielded 49 citations. After screening, we examined 7 relevant controlled trials. The DerSimonian and Laird random-effects model was used to perform the meta-analysis.

RESULTS: Seven controlled trials measuring the outcomes of fibrin glue in facelifts were used to estimate the pooled relative risk of complications and confidence intervals. Hematoma formation was four times less likely with the use of fibrin glue (relative risk 0.25, $P = .002$). There was no significant reduction in seroma formation (relative risk 0.56, $P = .19$). There was not enough data to properly measure 24-hour drainage and ecchymoses.

CONCLUSIONS: This analysis suggests that fibrin glue reduces the rates of hematoma formation, but does not significantly reduce the rates of seroma development.

LEVEL OF EVIDENCE: 3 Therapeutic.

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