

Tissue sealants may reduce haematoma and complications in face-lifts: A meta-analysis of comparative studies.

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Abstract:

The use of tissue sealants has increased among different surgical specialities. Face-lift and rhytidoplasty may cause several complications such as haematoma, ecchymosis, oedema, seroma, skin necrosis, wound dehiscence and wound infection. However, administration of tissue sealants may prevent the occurrence of some complications. We performed a meta-analysis of studies that compared tissue sealant use with controls to evaluate the outcomes. A systematic literature search was performed. The primary outcome was the incidence of haematoma. Secondary outcomes were wound drainage amount, oedema, ecchymosis, seroma, skin necrosis and hypertrophic scarring. Thirteen studies involving 2434 patients were retrieved and included in the present analysis. A statistically significant decrease in post-operative haematoma [risk ratio (RR), 0.37; 95% CI, 0.18-0.74; $p = 0.005$] and wound drainage (MD, -16.90, 95% CI = -25.71, -8.08, $p < 0.001$) was observed with tissue sealant use. A significant decrease in oedema was detected (RR, 0.30; 95% CI, 0.11-0.85, $p = 0.02$) but not in ecchymosis, seroma, skin necrosis, and hypertrophic scarring with tissue sealant use. The use of tissue sealants prevents post-operative haematomas and reduces wound drainage. Previous studies have shown a similar trend, but the power of this meta-analysis could verify this perception. Level of Evidence: III.

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