

# **Hematoma rates in drainless deep-plane face-lift surgery with and without the use of fibrin glue.**

Authors: Zoumalan R., Rizk S.S.

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## **Abstract:**

**Objective:** To determine the rate of hematoma formation in drainless deep-plane rhytidectomy and compare it with the rate using the same technique with the use of fibrin glue. **Methods:** This is a retrospective review of 605 patients (78 male and 527 female) who, over a 6-year period, underwent deep-plane face-lift surgery (n=544) or lateral superficial musculoaponeurotic system (SMAS) ectomy (n=61) by the senior author (S.S.R.) without the use of surgical drains. One hundred forty-six consecutive patients underwent rhytidectomy without fibrin tissue glue, and the following 459 consecutive patients were sprayed with fibrin glue under the flap prior to flap closure. Pressure dressings were used on all patients for 24 hours. **Results:** None of the patients in either group had major or expanding hematomas requiring operative intervention. In the group of patients treated without fibrin glue (n=146), there were 5 minor, nonexpanding hematomas, all managed by needle aspiration. This is a minor hematoma rate of 3.4%. In the fibrin glue group (n = 459), there were 2 hematomas, for a rate of 0.4%. Using a Fisher exact test, we found a statistically significant decrease in the hematoma rate from 3.4% to 0.4% ( $P = .01$ ). Male patients had a higher hematoma rate than female patients, and only men had significantly fewer hematomas when fibrin glue was applied ( $P = .01$ ). All 7 hematomas were recognized in the first 24 hours after surgery. Of the 7 patients with hematomas, 2 (29%) had emesis in the recovery room despite medication. **Conclusions:** The use of fibrin glue demonstrates a significant decrease in the rate of hematoma formation. Fibrin glue may benefit male more than female patients. If meticulous hemostasis and pressure dressings are used, drains are not necessary. The prevention and prompt treatment of

postoperative nausea may also help prevent hematoma formation.