A prospective, randomized, double-blind trial of the use of fibrin

sealant for face lifts.

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Abstract:

Fibrin sealant imitates the final phase of the blood coagulation process. Fibrinogen is converted into

fibrin on a tissue surface by the action of thrombin, which is then cross-linked by factor XIIIa,

creating a mechanically stable fibrin network. This fibrin network is thought to reduce the amount of

postoperative bleeding by sealing capillary vessels and allowing raw operative surfaces to adhere.

The authors conducted a prospective, double-blind, randomized, controlled trial on the use of fibrin

sealant in 20 consecutive patients undergoing bilateral face lifts by the same surgeon. Each patient

was randomized for the use of fibrin sealant on either the right or the left side with the contralateral

side acting as the control. Total drainage was recorded on each side for 24 hours before drains

were removed. The age range of the patients in the trial (all of whom were women) was 44 to 70

years (mean, 55). The side treated with fibrin glue had a median drainage of 10 ml and the control

side 30 ml. The Wilcoxon signed rank test shows a significant difference in drainage between sides

(p = 0.002). The reduction in postoperative drainage could also reduce pain and bruising, increasing

patient satisfaction with this procedure. The need for drains may also be obviated.