Fibrin sealant decreases postoperative drainage in immediate breast reconstruction by deep inferior epigastric perforator flap after mastectomy with axillary dissection.

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Publication Date: 2011

Abstract:

BACKGROUND: Serosanguinous drainage after breast reconstruction by deep inferior epigastric perforator flap (DIEP) can limit patient's discharge. We introduced fibrin sealant in immediate breast reconstruction by DIEP flap to reduce drainage after mastectomy with axillary dissection.

MATERIALS AND METHODS: We performed an open study on 30 consecutive female aged from 28 to 63 years old. All underwent immediate breast reconstructions by DIEP flaps after mastectomy and axillary dissection for cancer. Patients were divided in group 1 (N = 15) without fibrin sealant and group 2 (N = 15) where the flap, thoracic, and axillary areas were sprayed with 5 mL of liquid fibrin sealant before drains insertion. There was no difference in the patient's BMI, height, weight or age between both the groups. Blake suction drains were placed under the flap and in the axillary area.

RESULTS: No adverse effects were reported, after a 20-month median follow-up. Drainage volumes or durations were not correlated to the patient's BMI, nor the height, weight or age. Thoracic drainage duration was longer than abdominal drainage in both the groups. Average drained volumes from the thoracic area were lower (427 vs. 552 mL; P = 0.015) and thoracic drains were removed earlier (5.47 vs. 6.33 days P = 0.022), in group 2 than in group 1. The length of stay was also reduced after the use of fibrin sealant (5.53 vs. 6.33 days; P = 0.032).

CONCLUSION: This study introduce the interest of fibrin sealant to significantly decrease the postoperative drainage volume and duration in the thoracic area after immediate breast reconstruction by DIEP flap.

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