

Effect of fibrin glue on lymphatic drainage and on drain removal time after modified radical mastectomy: A prospective randomized study.

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Abstract:

Seroma formation is a frequently occurring complication in patients operated on because of breast cancer. This complication can be the cause of flap necrosis, can lead to infection, and can prolong the hospital stay. It can also cause a delay in chemotherapy and radiotherapy. In order to prevent seroma formation, various methods such as external compression dressings, immobilization of the arm, sclerotherapy, and suction drainage have been used, without much success. In animal models and some clinical studies, it has been stated that fibrin glue reduces seroma formation, and these statements generated high expectations. For this reason, a prospective study was planned to test this in patients who underwent modified radical mastectomy (MRM) because of breast cancer. Of the 54 patients studied, 27 patients had fibrin glue (4 ml) applied to wound surfaces and under the flap (study group); the remaining 27 patients were the control group. Daily drainage volumes, total amount of drainage, drain removal time, and seroma formation were recorded and compared between the two groups. The first-day drainage was significantly lower in the study group ($p < 0.05$, Student's t-test). There were no significant differences in daily drainage volumes, drain removal time, seroma formation frequency, and the number of seromas between the two groups ($p > 0.05$). In conclusion; fibrin glue application had no significant benefit on axillary lymphatic drainage, drain removal time, or seroma formation.