The effect of fibrin sealant combined with fibrinolysis inhibitor on reducing the amount of lymphatic leakage after axillary evacuation in breast cancer: A prospective randomized clinical trial.

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Abstract:

Background and Aims: One third of women undergoing mastectomy with axillary evacuation for primary breast cancer suffer from postoperative seromas leading to unnecessary costs and complications such as infections and new operations. Different methods to prevent seroma formation have been tried without permanent success. The aim of this prospective randomised study was to examine the effect of fibrin sealant with fibrinolysis inhibitor firstly on the reduction of the amount of lymphatic leakage after axillary evacuation and secondly on the reduction of days with drains and postoperative seroma punctures. Methods: 40 patients with primary breast cancer were prospectively randomised to the treatment group (n = 19) getting fibrin clue combined with fibrinolysis inhibitor (aprotinin) sprayed into the axillary fossa and to the control group (n = 21). Results: There were no differences in the incidence of postoperative seromas between the groups. However, the seromas were easier to treat if fibrin clue was used. Total quantity (mean +/- SD) of lymphorrhea and total number of aspirations (mean +/- SD) were almost twice as high in the patients of the control group compared to those having fibrin sealant. In the treatment group seromas resolved after one or occasionally after two aspirations in 71% of patients, while in the control group 90% of patients needed three or more aspirations. Conclusion: Potentially, fibrin sealant combined with fibrinolysis inhibitor might be used for the treatment of post-axillary evacuation lymphorrhea and seroma.