Randomized controlled trial of fibrin sealant to reduce postoperative drainage following elective lymph node dissection.

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Abstract:

Background: Excessive postoperative drainage following groin and axillary lymphadenectomy may be associated with a prolonged hospital stay and an increased complication rate. The use of fibrin sealant before wound closure may reduce postoperative wound drainage. Methods: Consecutive patients undergoing elective groin or axillary lymphadenectomy were randomized to standard wound closure or to having fibrin sealant sprayed on to the wound bed before closure. Postoperative wound drainage, duration of drainage and complications were recorded, as were locoregional recurrence, distant metastasis and mortality. Results: A total of 74 patients requiring 38 groin and 36 axillary dissections were randomized. The median postoperative wound drainage volume for the groin dissection cohort was 762 (range 25-3255) ml in the control group and 892 (265-2895) ml in the treatment group (P = 0.704). Drainage volumes in the axillary cohort were 590 (230-9605) and 565 (30-1835) ml in the control and treatment groups respectively (P = 0.217). There was no difference in the duration of drainage or postoperative complication rate between the treatment groups in both the axillary and groin cohorts. Local recurrence, distant metastasis and mortality rates did not differ between the treatment groups. Conclusion: There was no advantage in using fibrin sealant during elective lymphadenectomy in terms of reducing drainage output or postoperative complication rate.
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