

Intraoperative application of fibrin sealant does not reduce the duration of closed suction drainage following radical axillary lymph node dissection in melanoma patients: A prospective randomized trial in 58 patients.

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Abstract:

Background: Patients suffering from malignant melanoma often require radical lymph node dissection of the axillary nodal basin. The effects of intraoperative application of fibrin sealant following radical axillary lymph node dissection (RALND) on the incidence of postoperative lymphatic secretion are discussed. To study the effect of intraoperatively applied fibrin sealant following RALND a randomized patient-blinded trial was carried out. Methods: Fifty-eight patients with axillary lymph node metastases of malignant melanoma underwent therapeutic RALND and were randomized into two groups: 29 patients received 2 cc of fibrin glue intraoperatively and 29 patients were only irrigated with 0.9% saline. The amount of drainage was recorded every 24 h. The main outcome criterion was the duration of drain placement in the wound. Minor criteria were the total amount of fluid and the length of hospital stay. Statistical analysis was performed using Spearman's log-rank correlation and paired t-test. Results: There was no significant difference between the nonfibrin group 5 days (range = 3.6-5.7 days) and the fibrin group 5 days (range = 4.1-8.5 days) ($p = 0.701$). The total amount of fluid for the nonfibrin group (410 cc, range = 362-727 cc) and that for the fibrin group (503 cc, range = 369-1098 cc) ($p = 0.605$) and the length of postoperative hospital stay of 6 days (range = 5.4-7) vs. 7 days (range = 5.9-10.7), respectively, were not different between both groups ($p = 0.387$). Conclusion: Considering our study results, we cannot recommend the use of 2 cc of fibrin glue intraoperatively in the prevention of lymphatic

secretion in patients undergoing RALND for metastatic melanoma. © 2008 Societe Internationale de Chirurgie.