

A comparison of fibrin sealant versus standard closure in the reduction of postoperative morbidity after groin dissection: A systematic review and meta-analysis.

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Abstract:

Introduction: Groin dissection is a commonly performed procedure for patients with lower limb malignant conditions with an associated high complication rate. Numerous surgical strategies have been suggested to reduce morbidity. Aim: To systematically review one of those methods-the efficacy of Fibrin Sealant (FS)-in comparison to Standard Closure (SC) methods in reducing postoperative morbidity from groin dissection. Methods: A systematic search of the literature, study selection and data extraction using an independent screening process. Only randomised controlled trials (RCTs) comparing Fibrin Sealant to standard care in patients with malignant disease undergoing groin dissection reporting at least one outcome measure relating to postoperative complications were included in the review. Results: A total of 6 RCTs were included. There were no statistically significant differences in postoperative surgical site infection (SSI) rates between FS and SC. The overall incidence of wound infection in the FS group was 32 % (43/133) in comparison to 34 % (45/132) in the SC group. (Pooled risk ratio = 0.94 [0.68, 1.32]; 95 % CI; P = 0.74). The incidence of seroma for the FS group (30/133) and the SC group (30/132) did not differ (Pooled risk ratio = 1.03 [0.67, 1.58]; 95 % CI; P Value = 0.90). The overall complication rates were similar between both groups. Conclusion: Based on the current evidence, fibrin sealant does not significantly reduce morbidity in patients undergoing groin dissection for the management of malignant disease when compared to standard closure techniques in use.