

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:

Background: Groin dissection is commonly performed in patients with lower limb malignant conditions such as malignant melanoma, vulvar, penile, anal and scrotal carcinomas with an associated high complication rate. Numerous surgical strategies have been suggested to reduce morbidity. We aimed to systematically review one of those methods - fibrin sealant (FS) - in comparison to standard closure (SC) in reducing postoperative morbidity from groin dissection.

Methods: A systematic search of the literature, study selection and data extraction using an independent screening process, assessment of risk of bias and statistical data analysis was performed. 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) compared to 34% (45/132) in the SC group. (Pooled risk ratio = 0.0.94 [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). Complication rates were similar between groups. **Conclusion:** Based on 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.

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