

Can fibrin sealant be used to prevent postoperative drainage? A prospective randomized double blind trial.

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Abstract:

Fibrin sealant imitates the final phase of the blood coagulation process. A stable fibrin network is formed on the wound surface, which is thought to reduce the amount of postoperative bleeding and serous exudate from the wound. Fibrin sealants have proved effective in a wide range of surgical procedures. We undertook a prospective randomized, double blind, controlled trial in the use of a new fibrin sealant, Beriplast P, following axillary dissection (n=10), groin dissection (n=8), latissimus dorsi flaps (n=10) and abdominoplasties (n=16). Fibrin sealant (3 ml) was sprayed onto the wounds following haemostasis, prior to closure. Statistical analysis showed that drainage was reduced in the latissimus dorsi group in the first 24 h ($P=0.011$). However, there were no other significant differences, and length of hospital stay was similar in all groups. Whilst fibrin sealant may control bleeding and serous exudate in smaller surgical fields, we believe that the use of small volumes of sealant in relatively large wounds, particularly where the lymphatic drainage has been affected, is of limited clinical value. It does little to reduce total wound drainage or length of hospital stay. The cost of fibrin sealant is likely to preclude the use of larger volumes.