

# **Systematic review and meta-analysis of the use of fibrin sealant to prevent seroma formation after breast cancer surgery. [Review] [36 refs]**

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## **Abstract:**

**BACKGROUND:** The use of fibrin sealant has been proposed as a means of preventing seroma formation following breast cancer surgery. Conflicting trial results require the efficacy of fibrin sealant to be reviewed critically.

**METHODS:** A systematic review of randomized controlled trials was conducted to examine the efficacy of fibrin sealants in reducing postoperative drainage and seroma formation after breast cancer surgery. Studies were identified by computer searches of Medline, Embase, the Cochrane Central Register of Controlled Trials and manufacturer websites (to June 2005), and bibliographic searches of published articles. Trials were eligible for inclusion if they reported data on postoperative drainage and the number of patients who developed a seroma.

**RESULTS:** Eleven trials met the criteria for inclusion. Generally, the trials were small and of poor methodological quality. Fibrin sealant did not reduce the rate of postoperative seroma (relative risk 1.14, 95 per cent confidence interval (c.i.) 0.88 to 1.46), the volume of drainage (weighted mean difference - 117.7, 95 per cent c.i. - 259.2 to 23.8 ml), or the length of hospital stay (weighted mean difference - 0.38, 95 per cent c.i. - 1.58 to 0.83 days).

**CONCLUSIONS:** The current evidence does not support the use of fibrin sealant in breast cancer

surgery to reduce postoperative drainage or seroma formation.

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