

Effect of fibrin glue lymphatic drainage after modified radical mastectomy: A prospective randomized trial.

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Abstract:

Fibrin as a tissue sealant has been used since the turn of the century for hemostasis. The development of cryoprecipitate and the resultant availability of higher concentrations of fibrinogen have led to a resurgence of interest in this material. Fibrin glue has since been shown to be effective for numerous applications throughout the field of surgery. Animal studies have shown fibrin glue to be effective at reducing drain output after mastectomy. Human studies, however, have been equivocal. Our objectives were to determine whether the use of fibrin glue would decrease lymphatic drainage after modified radical mastectomy and subsequently reduce time to drain removal. A prospective randomized trial was conducted consisting of 27 women. All women received modified radical mastectomy. At the completion of the mastectomy they were randomized to receive either standard closure or the application of fibrin glue before standard closure. Patients were then monitored for daily drain output, time to drain removal, and wound complications. A total of 14 women received fibrin glue and 13 received no glue. Those patients receiving fibrin glue had a significantly higher average drain output than patients who did not receive glue (1308 vs 754 cm³; $P = 0.012$). Time to drain removal was also increased by 4 days, although this did not reach statistical significance. The overall complication rate was higher for the fibrin glue group, although again, this did not reach significance. The application of fibrin glue significantly increased drain total drain output after modified radical mastectomy. Time to drain removal was increased as was the complication rate. On the basis of these data fibrin glue cannot be recommended for routine use in modified radical mastectomy.