

# **Reduction of lymphatic drainage posterior to modified radical mastectomy with the application of fibrin glue. [Spanish]**

Authors: Segura-Castillo J.L., Estrada-Rivera O., Castro-Cervantes J.M., Cortes-Flores A.O.,  
Velazquez-Ramirez G.A., Gonzalez-Ojeda A.

Publication Date: 2005

## **Abstract:**

**OBJECTIVE:** Our objective was to investigate the effectiveness of fibrin glue to reduce hemato-lymphatic fluid production after modified radical mastectomy (MRM) in women with breast cancer. **MATERIAL AND METHODS:** A total of 43 women treated surgically were randomly assigned to receive 10 ml of fibrin glue at the end of the breast resection plus closed suction drains (n = 22), or drain system only as a control group (n = 23). Outcome variables were fluid collected in the drainage system measured each 24 h. Drains were removed when a 50 ml output per day was obtained. Seroma formation and flap complications were also investigated. **RESULTS:** The average age was 48.36 +/- 8.9 years for the study group and 52.87 +/- 9.74 years for the control group (p = 0.11). Body mass index (BMI) ranged between 22 and 35 kg/m<sup>2</sup>: 28.1 +/- 2.7 vs. 29.92 +/- 4.0 kg/m<sup>2</sup> (p = 0.27). A reduction of the fluid drained was observed from the first postoperative day in the study group in contrast with the control (174.55 +/- 64.69 vs. 281.22 +/- 116.91, p = 0.001). A correlation between the BMI and the exposed surgical area was also statistically significant (p < 0.002), as well as the day the drains were extracted (p < 0.05). The incidence of seroma formation was 9% in the study group and 34.78% in the control, a statistically significant finding (p < 0.05). **CONCLUSIONS:** Fibrin glue locally applied to the surgical wound under the flap and axilla significantly reduced the amount and duration of lymphatic fluid produced after MRM with axillary dissection. Also, a significant reduction in the incidence of seromas was observed.