

Feracrylum in Reduction of Seroma after Mastectomy

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DECLARATION

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Apart from where citations are made, this dissertation is my original work and has not been presented in any other institution of higher learning.

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ABSTRACT

Background:

Seroma formation is a common problem after mastectomy. The incidence varies between 2.5% to 51%. It is often an ongoing problem after removal of the drain, and repeated skin puncture is sometimes necessary to remove the seroma. In addition to many ambulatory visits, this also leads to an increased risk of infection and adjuvant treatment can be delayed for several weeks.

Different procedures have been tried to avoid seroma formation including immobilization of the arm and shoulder after mastectomy, different drain regimens, closing of the dead space of the cavity, different chemical substances such as tranexamic acid, thrombin and fibrin. However, none of these has been successful.

The aim of the study: To find out whether Feracrylum can reduce the seroma formation after mastectomy.

Study design: A prospective randomized controlled study, with 2 groups of 24 patients each. 50ml of 1% aqueous solution of Feracrylum was applied over the raw areas intra operatively in 24 patients, and the other 24 patients were the control group.

Inclusion criteria: Women with primary breast cancer, undergoing modified radical mastectomy.

Results: Data for 48 patients was available for the final analysis. 24 underwent mastectomy feracrylum infiltration and tube drainage while 24 had routine drainage. Seroma rate was 88% in the Feracrylum group while it was 38% in the control group ($p \leq 0.0001$). The mean volume of drainage was less with Feracrylum 695ml vs. 1486ml ($p \leq 0.0001$). There was significant reduction in the days of drain retention 5.9 vs. 12.8 ($p \leq 0.0001$), and the rate of wound related complications 8% vs. 71% in the Feracrylum group ($p \leq 0.0001$).

Conclusion: Feracrylum does not reduce the incidence of seroma after mastectomy but it reduces the total volume of drainage, the number of days necessary for drain retention and the rate of wound complications.