

Seroma prevention using fibrin glue in a rat mastectomy model.

Authors: Lindsey W.H., Masterson T.M., Spotnitz W.D., Wilhelm M.C., Morgan R.F.

Publication Date: 1990

Abstract:

Seromas are a frequent complication of mastectomy (17% to 53%) in humans and are correlated to skin flap elevation, lymphovascular interruption, and drainage into surgically created potential spaces. The use of intraoperative topic fibrin glue to reduce morbidity in rats undergoing radical mastectomies has been evaluated. A model consistently producing seromas was developed by radical mastectomy and lymphadenectomy in the Sprague-Dawley rat. A fibrin glue application procedure was tested using this model. The double-blinded protocol called for spray application of saline or fibrin glue to mastectomy wounds followed by sequential inspection and necropsy on postoperative days 5, 8, 11 and 14. Topical fibrin glue was shown to be statistically significant in decreasing the presentation of seromas following a radical mastectomy in the Sprague-Dawley rat.