Abstract

A STUDY ON ROLE OF FLAP TACKING AND COMPRESSION DRESSINGS IN POST-MASTECTOMY SEROMA IN CARCINOMA BREAST

Keywords: Carcinoma Breast, Modified Radical Mastectomy, Seroma, Flap Tacking, Mechanical Closure, Dead space, Compression Dressings

INTRODUCTION
The most common mastectomy-associated complication is seroma formation. Seromas can be associated with other more serious complications such as skin flap necrosis, delayed wound healing, infection, and lymphedema. The flap tacking procedure that closes the axillary fossa dead space and tacks the mastectomy flaps to the chest wall has been suggested as one potential technique to reduce the incidence of postmastectomy seromas. Seromas are a significant cause of morbidity after modified radical mastectomy. Closing dead space by suturing skin flaps to underlying muscle combined with early removal of closed suction drains is associated with a low incidence of seroma formation after mastectomy. Use of this technique has important economic and clinical implications for patients who had mastectomy. The flap tacking procedure 1) reduces postmastectomy seromas and 2) reduces the amount of postoperative hospital visits and care. Any intervention that could reduce the volume and duration of postoperative drainage would be beneficial. Applying external pressure to the flaps would obliterate dead space and encourage adhesions of the flaps to the underlying muscles. The purpose of this study is also to determine whether an external compression dressing after MRM would decrease postoperative drainage, afford earlier drain removal, and reduce subsequent seroma formation.
AIMS & OBJECTIVES:

1. To know the effect of flap tacking and compressive dressings in modified radical mastectomy patients of carcinoma breast
2. To compare the role of flap tacking and compressive dressings with that of standard wound closure and standard post-operative dressings in reducing post-mastectomy seroma.

MATERIALS AND METHODS

PLACE OF STUDY:
Department of General Surgery, Govt. Stanley Medical College & Hospital, Chennai

DURATION:
JAN 2014 TO NOV 2014

STUDY DESIGN:
Prospective study

SAMPLE SIZE: 38

INCLUSION CRITERIA:
Patients undergoing Modified Radical Mastectomy for Carcinoma Breast

EXCLUSION CRITERIA:
Patients undergoing - Breast Conservation Surgery
-Breast Reconstruction
-Previously operated Patients

METHODOLOGY:

- Patients undergoing Modified Radical Mastectomy for Carcinoma Breast in our Department from January 2014 to November 2014 are included in this study
- During closure, the skin flaps are tacked to the underlying pectoralis major with uniformly spaced 2-0 Vicryl sutures and wound is closed with a closed-suction drain. Compressive dressings are applied for the wound. The dressing is changed on the 4th Post-operative day
again with compressive dressings unless soaked or patient has unexplained fever which warrants wound inspection earlier. The amount of seroma is calculated in a standard measuring jar everyday.

- The volume of seroma are compared to those patients undergoing conventional closure of wound and conventional wound dressings.
- Drains were removed when the total daily amount was <30 cc.
- Postoperative drainage volume, total days with drain, and frequency of seroma formation were recorded for each patient.
- Observations are tabulated according to the pre-designed proforma.
- The results are analyzed using Microsoft Excel for tabular transformation and graphical representation. For comparing the parameters and statistical analysis 2 sample z-test is used.

CONCLUSION

The role of flap tacking and compressive dressings in Modified Radical Mastectomy has reduced the seroma formation significantly and has led to reduced early removal of drains, institution of 1\textsuperscript{st} cycle of chemotherapy before discharge and thus reducing the stay in hospital. It has also led to reduced incidence of flap necrosis post operatively. However, further studies are needed to stratify which of the two techniques used is solely responsible for the reduction in seroma. Similarly, whether co-morbid illness like Diabetes, Hypertension and institution of Neo-Adjuvant Chemotherapy has any confounding effect on the formation of seroma needs to be studied. Several preliminary and prospective studies have shown that suturing the flaps to the chest wall thus obliterating the dead space has proved to be useful allowing smoother recovery. At present, this method of flap tacking has not gained widespread acceptance, probably due to longer time needed for the surgery (15 to 20 minutes). Nevertheless this additional time is worth spending as
it results in reduced formation of seromas and other complications, reduced hospital stay and fewer nursing care.