

***A STUDY ON ROLE OF CONTINUOUS SUCTION DRAIN TUBE IN POST-
MASTECTOMY SEROMA COLLECTION IN CARCINOMA BREAST***

Keywords: Carcinoma Breast, Modified Radical Mastectomy, Seroma, drain tube, dead space, continuous suction

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 continuous suction drain tube procedure 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. Continuous suction of the drain tube through vacuum pump combined with early removal of 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 continuous suction DT 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. Creating negative pressure would obliterate dead space and encourage adhesions of the flaps to the underlying muscles. This would

decrease postoperative drainage, afford earlier drain removal, and reduce subsequent seroma formation.

AIMS & OBJECTIVES:

1. To study the effect of continuous mechanical suction drain tube in modified radical mastectomy patients of carcinoma breast
2. To compare the role of continuous suction drain tube with that of standard wound closure and standard closed suction drain in reducing post-mastectomy seroma.

MATERIALS AND METHODS

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

DURATION:

Jan 2016 to sep 2016

STUDY DESIGN:

Prospective study

SAMPLE SIZE : 30

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 are included in this study
- During closure,the wound is closed with a closed-suction drain.suction drain end is connected with vacuum pump which is available in the wards.suction drain is disconnected from pump for every three hours with one hour interval. .The amount of seroma collected in vacuum is calculated in a standard measuring jar everyday.
- The volume of seroma are compared to those patients undergoing conventional closure of wound with suction drain
- 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 & statistical analysis 2 sample Z test is used

CONCLUSION

- The role of continuous suction drain tube in Modified Radical Mastectomy has reduced the formation of seroma significantly and has led to early removal of drains, institution of 1st cycle of chemotherapy before discharging the patient and thus reducing the hospital stay. It has also led to low incidence of flap necrosis post operatively. However, further studies are needed to know whether co-morbid illness like Diabetes, Hypertension and institution of Neo-Adjuvant Chemotherapy has any confounding effect on the formation of seroma . Several prospective studies have shown that continuous suction drain tube in obliterating the dead space has proved to be useful for smoother recovery.