

Impact of dead space closure and lymph vessel ligation during MRM on Post-operative seroma formation: A two institutional randomized study.

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Abstract Background: Seroma formation is the most common post-operative (PO) sequela among female patients undergoing modified radical mastectomy (MRM) for breast cancer; reducing the volume and timing of formation and drainage remains a goal always sought by breast surgeons.

Methods: 110 breast cancer female patients were selected randomly (T2) and divided into two groups. Group 1 (n=56) was operated on by using the new surgical technique by ligating all the tissues connecting the axillary vein bundle to the specimen, to suture anterior edge of latissimus dorsi muscle to the chest wall and to suture the skin flaps to the underlying muscle by subcutaneous sutures in rows, group 2 (n=54) was operated on by the conventional technique.

Results: the drainage volume in the first 3 days for patients in group 1 was significantly less than that in group 2 (P value less than 0.05) .the duration of drainage in group 1 was shorter than in group 2 (P value less than 0.05) .the seroma formation in group1 (3.6%) which is significantly less than that in group2 (16.7%) (P value less than 0.05).

Conclusion: Dead space closure and lymph vessel ligation during MRM significantly reduces the incidence, volume, and duration needed for drainage of PO seroma following MRM.

KEYWORDS: Seroma; Modified radical mastectomy; Breast cancer.