

EVALUATION OF A TRIANGULAR ADVANCEMENT FLAP TO AVOID DOG EAR IN MASTECTOMY SCARS AMONG OBESE BREAST CANCER PATIENTS

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INTRODUCTION

Breast cancer is considered the world’s most commonly diagnosed cancer and it is by far the world’s most common cancer among women particularly. Surgical treatment options are based on the staging of the tumor and include breast conserving surgery and various types of mastectomy. Modified radical mastectomy was the basic procedure for breast cancer surgical management. Mastectomy is done through a transverse elliptical incision and it has a wide lateral angle and unequal lengths between the upper and lower flaps. During wound closure we may experience upward and outward protrusion of the tissue at both angles; this is what we call the “dog-ear.”There are various techniques to avoid the dog-ear deformity such as; “Fish-shaped” incision or Y closure, the tear drop incision, liposuction, the ‘L’ technique, modified M-plasty technique and the triangular advancement flap which is the technique we are describing here.

AIM OF THE WORK

The aim of the study was to evaluate the use of triangular advancement flap technique to avoid dog ear deformity in the lateral end of mastectomy wounds in large breasted obese women regarding:

- Avoidance of dog ear deformity.

- Patient satisfaction.

- Pain and/or discomfort.

- Cosmetic result.

- Length of the wound.

- Surgical time consumed.

PATIENTS AND METHODS

PATIENTS: This study was conducted on 50 large breasted (cup C and more) obese women with BMI ≥35who had pathologically proved breast cancer, scheduled for mastectomy and were admitted in the surgical oncology unit, Alexandria main university hospital and in Medical Research Institute’s surgical department.

METHODS: Consents were taken from all patients and they were subjected to full clinical examinationand breast examination, routine laboratory investigations, metastatic work-up, breast mammography and ultrasound and ultrasound guided TCNB. Our mastectomy technique started with a modified D-shaped incision instead of the traditional elliptical incision with the excision of an additional triangle of the skin at the base of the lateral angle. Wound closure started laterally, in a manner that allowed the lateral and superior skin to be advanced medially. The end result was a scar that was gradually descending downwards at the lateral end with removal of the dog-ear deformity.

RESULTS

Table 1: Frequencies of Patient and surgeon satisfaction

Patient satisfaction	Counts	% of Total	Cumulative %
Very satisfied	7	14.0 %	14.0 %
Satisfied	13	26.0 %	40.0 %
Neutral	25	50.0 %	90.0 %
Unsatisfied	7	14.0%	100%
Surgeon satisfaction			
Very satisfied	18	36.0 %	36.0 %
Satisfied	17	34.0 %	70.0 %
Neutral	8	16.0 %	86.0 %
unsatisfied	7	14.0 %	100.0 %

Table 2: Frequencies of incidence of dog ear after using the triangular advancement flap

Correction of dog ear	Counts	% of Total	Cumulative %
Failed	6	12.0 %	12.0 %
Succeeded	44	88.0 %	100.0 %

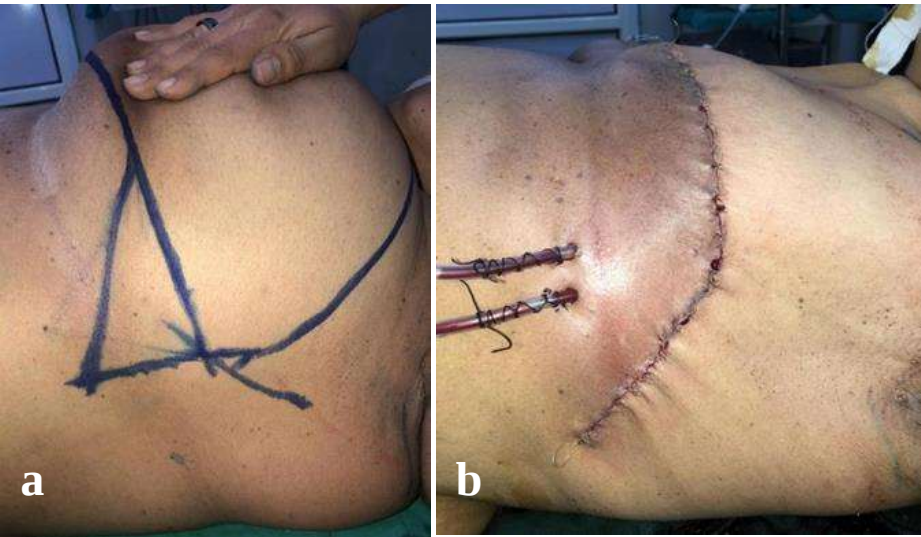


Figure1: A 52 year old ♀ patient with left breast cancer, DM, HTN, BMI 37, cup size D, underwent MRM with the triangular advancement flap technique (a) preoperative incision planning, (b) immediate postoperative result.

CONCLUSIONS

From this study we can conclude that the triangular advancement flap technique for correction of the lateral dog ear deformity, is a feasible and effective technique to perform by all general surgeons. It showed very good cosmetic results represented in patients and surgeon satisfaction. This study showed that this technique is less time consuming and has less wound complications represented in lower incidence rate of flap necrosis and wound dehiscence in comparison to other techniques which were previously described in literature.