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Assessment Outcome of Laterals Based Dermo Glandular Flap for Breast Contouring in Free Nipple Graft Reduction Mammoplasty

Rabab Abass Hasan

Abstract:

Background: in patient with major hypertrophy and ptosis a free nipple dermo-glandular flap is procedure of choice a major limitation of this technique is in sufficient breast projection, using of lateral based dermo-glandular flap can added additional tissue to increase projection and good filling.

Methods: Marking based on principle of breast; when excised tissue made, marked for diamond dermo- glandular flap from breast tissue before to excise then de- epithelized and fix on pectoral fascia.

Results: 8 cases done by this technique; the depending criteria include major breast hypertrophy and ptosis more than 1500 g, Nipple -areolar transposition >15 cm; no major complication just superficial Slugging of nipple areolar graft, that heal spontaneously with good improvement in symptoms and good breast projection and Shape

Conclusions: using lateral based dermo-glandular flap give good shape and breast projection and effective in major breast hypertrophy and Ptosis.

Keyword: Hypertrophy; ptosis, reduction mammoplasty and free nipple graft.

Introduction:-Many breast reduction techniques had made safely and can combined with other procedures (1)(2)

This procedure improve appearance and Symptoms, free nipple graft is one of these procedures (3) and many procedure can used for solve the problem(4)(5) . The main aim of this technique to increases breast projection because in many cases with sever ptosis and hypertrophy the upper pole of breast is empty. So our technique used to increase projection with no major complication.

Methodology: In this, eight cases that admitted to the out patient clinic, where pre operative evaluation include; age; body mass index (BMI), size that fit for reduction; nipple areole complex position, complication post operation and breast shape. all my case no previous history of radiation.

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In all cases had sign and Symptoms of breast hypertrophy include; Neck, back and shoulder Pain, inflammatory maceration, difficulty in breathing during exercise and great psychological burden because of appearance. Indicated patients those who had major breast hypertrophy and ptosis with nipple areal complex transposition more than 15cm and those who had desire for change the breast shape.

The marking is made using a wise pattern and patient in standing position; supra-Sternal notch, midline from sternum and nipple to clavicle position, all fixed. The arm may be elevated to determine the lateral border of breast in cases with significant lateral excess. Inframammary fold (IMF) and anterior projection are marked using a flexible for the new position of nipple is made on the inframammary fold and the areola is draw in (2-4 cm) position around the nipple.

The vertical axis is marked beneath the IMF and with the direction of midline.

Then move manually by hand the breast tissue medially and laterally along the longitudinal, axis of the breast below the IMF. This area between the extension of the lateral medial limbs; determined the extension of the diamond flap which deepitheliazed after that. The length of each limb is between 6-7 cm from the neo nipple to the IMF; which design about 90° with a new nipple position. The remaining tissue below these limbs are marked and extended to contra lateral breast with 2 cm gap apart from each one. (Figure 1).

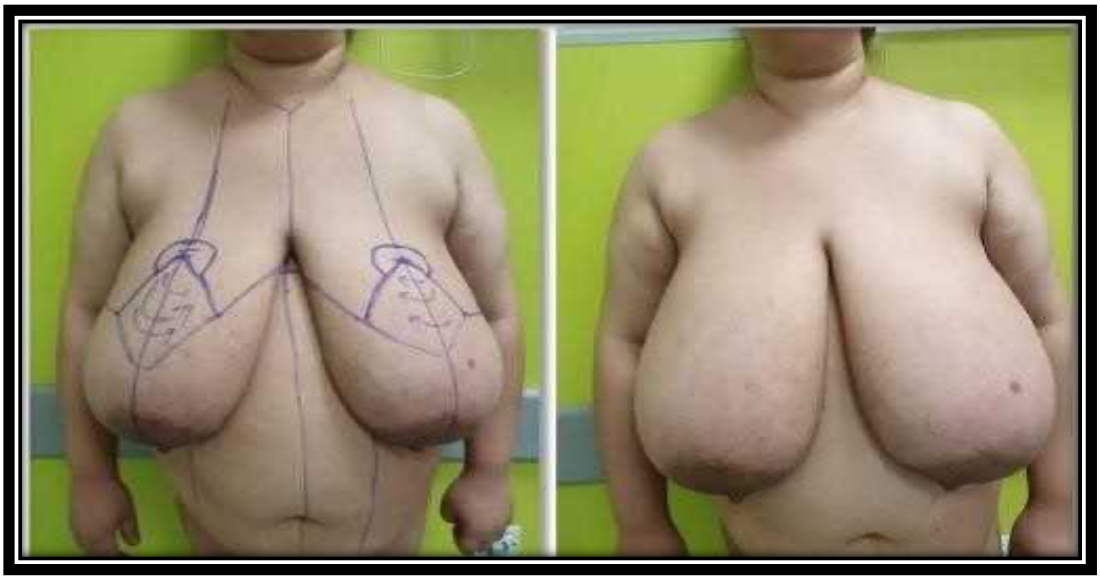

Figure (1). Pre operative marking

Nipple-areolar tissue harvested from the deep-dermal layer as a full thickness tissue graft. The tissue marked between the lateral and medial limbs (extension of breast tissue) dissected deep to the pectoral fascia then the design dermo-glandular flap that based laterally separated in a diamond shape as a lateral based pedicle and continued separated to cover the second inter costal space.

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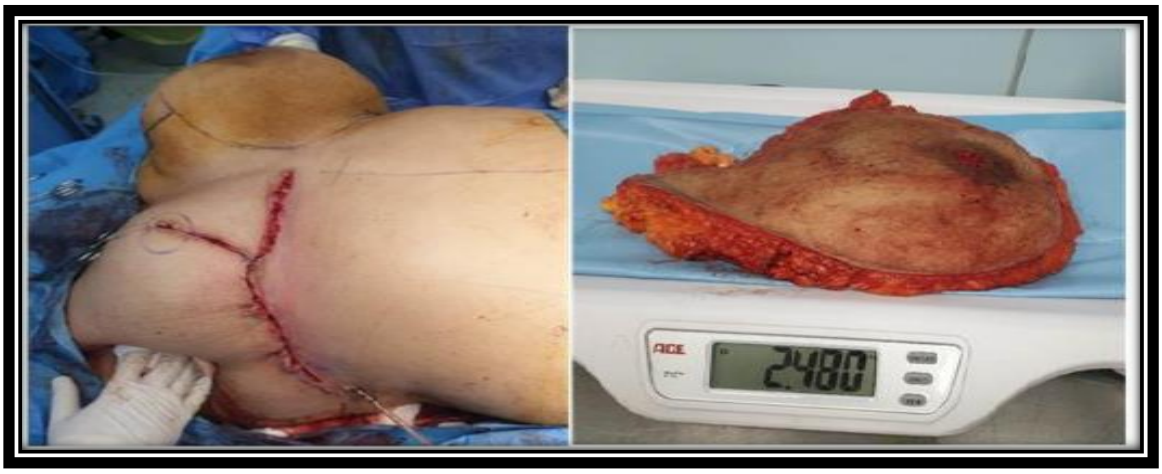
Then this diamond flap elevated and sutured medially and fixed in a Puked done in the medial aspect of the breast and fixed to muscle fascia; by this technique. ; The upper pole can projected and filled and at the same time can decrease the lateral flattens and extension of breast tissue with adequate projection and contouring.(Figure 2A).

After that, the medial and lateral flaps are sutured to gather and complete the wise pattern shape by fixed and suture in the middle portion and hooked vertically and turned90° inferiorly and suture to the inframammary fold (IMF); so anew breast inferior pole with a vertical T incision Pattern.

(Figure 2A). Design and elevation of dermo-glandular flap and. suturing to the pectoral muscle fascia.

At the end of the operation the new nipple areolar complex sutured in a new position as a Full thickness graft fixed in areolar with (4- 4.5) cm diameter, and fixed with a tie over three layered dressing with a good dressing applied over each graft (Figure 3B).

Drains was putted post operation and remove 5 days after that. Over all sutures were absorbable with 4.0 vicryle and no need to remove only the external suture 14-21 days later on removed.



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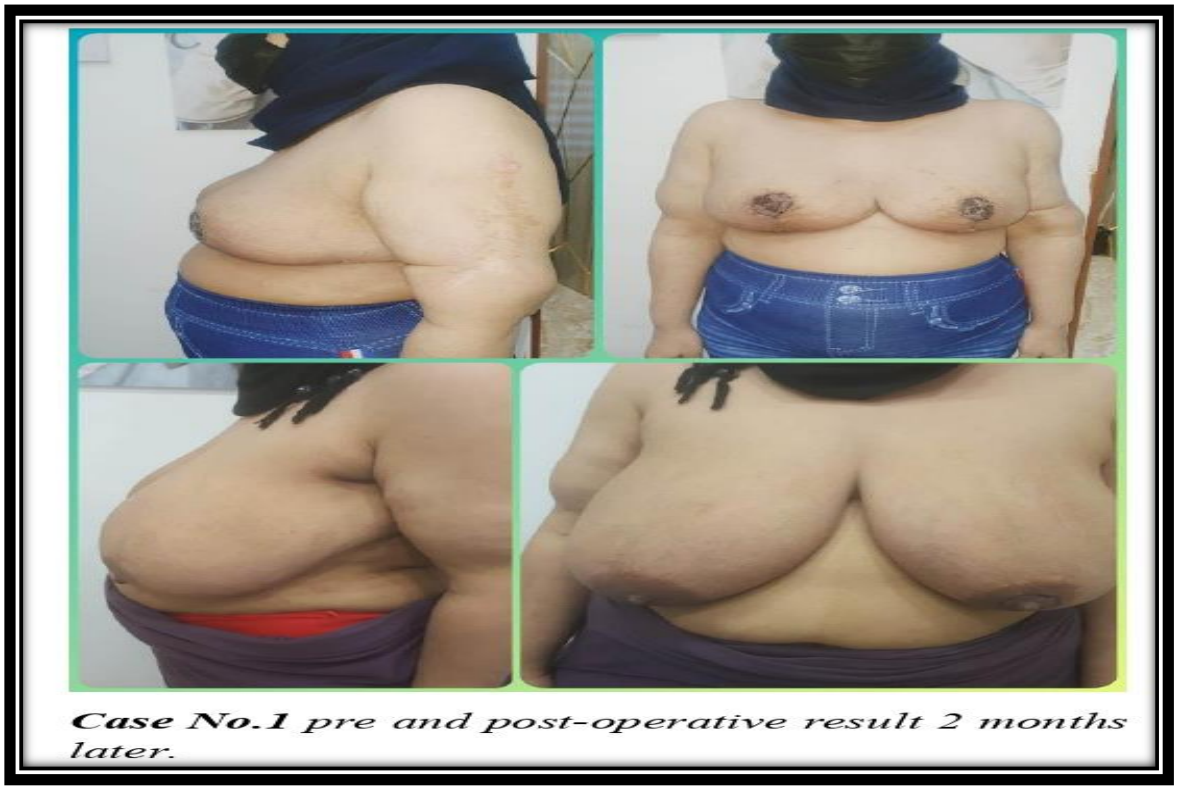
(Figure 2B)



Case No.1 *pre and post-operative result 2 months later.*

Case No.2 *2 months after reduction mammoplasty with still scar obvios and lightening with time.*

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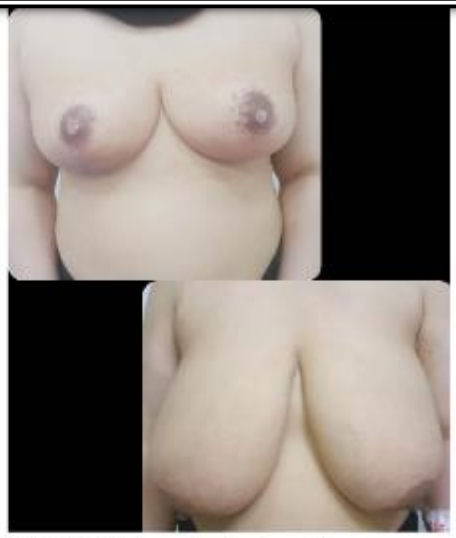
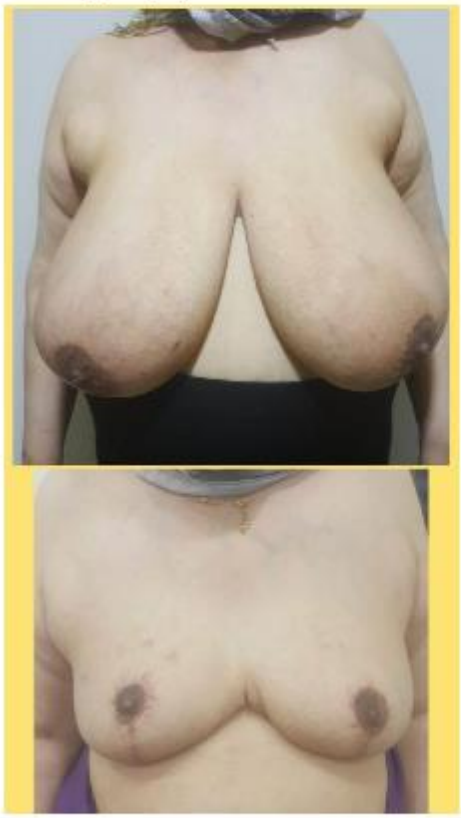
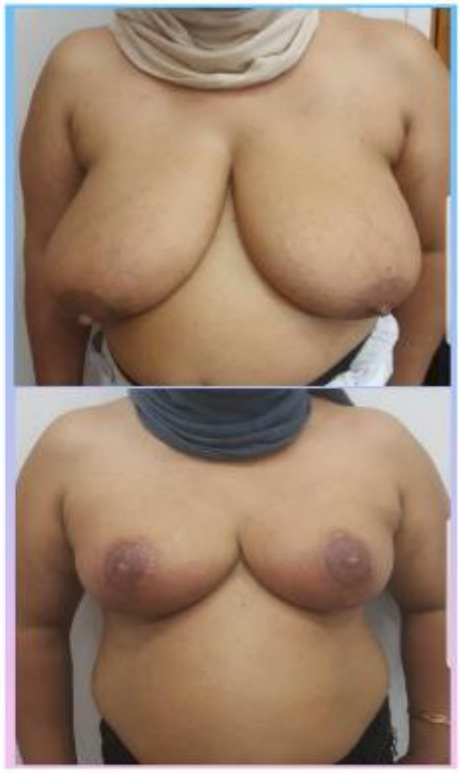
Case No.3 *after 8 months with good breast contouring and projection.*



Case No.5 *The result after 5 months.*



Case No.4



Case No.6*. Reduction mammoplasty 8 months afier operation*

Result: In this technique, we need to excise about 1000 gm of tissue per each breast in about 5 cases and more in 2 cases in about 20000 gm per each breast, in one case the amount of resection was 15 kg with a good - improvement in symptom, post operation and good projection result. The distance between the new nipple to sternal notch was21-24cm and the distant between the new nipple to the original one was 15cm. Regarding complication post op in day (10-30 day) neither experienced graft loss infection or dehi scenes Just only superficial Sloughing of graft that resolve with time and follow up. . The scar of surgery become inconspicuous gradually. Over all, cases result was acceptable with good improvement in shaping, contouring and projection.

Discussion: The aim of reduction mammoplasty is to regain the youthful and graceful result. In especial case where hypertrophied breasts; are the Source of psychological and emotional distress for the patients in addition to the problems related to excess glandular and tissue weight of breast, as are a result of gravity(6) . Marshal et al (7) show that using a NAC graft with the distance more than 15 cm need to elevate, based on technique of vertical incision.

Spear et al (8) used a central breast dermo glandular flap to get a good projection; while in this technique. a lateral based dermo-glandular flap not only improve the projection and contouring of breast, but also decrease a lateral extension of breast. Fermanadez et al (9) show that an inverted T-scar pattern is a better scar to achieve, even that a scar regress over 3-6 month gradually & will not the problem.

An assessment of the post operative complications, they were favorable when taken in mind conclusion critical and number overall cases with previous radiation exposure that increases risk of infection and / or smoking that increases risk of dehiscence. (10)

The age or weight of tissue resection don’t have an effect on complication. Zhao et al (11) Suggested that Complication might because of decrease or disturbed blood supply; in this technique blood supply was reserved with using lateral dermo-glandular flap. The major limitation in our study is a short follow up period between 6-12 months and prolong the period of follow-up if can to get enough post-operative data

Conclusion: Using of lateral based dermo-glandular flap technique for nipple areolar graft in reduction mammoplasty give good cosmetic with adequate projection and Contouring of breast. It's a safe and effective method in sever breast hypertrophy and Ptosis with patients with nipple areolar transposition greater than 15cm.

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