

## Revisit to Bipedicle Flap Reduction Mammoplasty

HAMDY BASHA, M.D. and AMIR ABDEL KARIM, M.D.

*The Department of Plastic and Reconstructive Surgery, Matareya Teaching Hospital, Cairo, Egypt.*

### ABSTRACT

Since 1995, 25 cases of severe mammary hypertrophy were treated by bipedicle vertical dermal flap reduction technique. The choice of technique was according to its advantages to these selected cases. The technique and the results were discussed.

### INTRODUCTION

Severe mammary hypertrophy were managed by many techniques, as superior based, inferior based, and bipedicle vertical dermal flap [1,2,3,5]. The choice of the technique depends on many parameters. Of these are the vascularity of the nipple areola, its sensitivity, the reduced breast size and contour. Some reports included the simplicity of the technique as one of these parameters. Although there are many reports discuss reduction mammoplasty, but also there are many problems still present and wait for solutions. These problems are, partial or complete loss of the nipple areola, insufficient breast reduction, asymmetrical breasts, and inadequate contour. If the length and number of incisions would be considered as problems, there are two more added to the list?.

In our work, we considered the main problems, tried to choose the adequate technique to reach the patient's goals and hoped the satisfactory results to them.

### MATERIAL AND METHODS

25 Female cases, their age ranged between, 20:50 years with an average of 35 years. All were married, 15 of them were workers and the rest were housewives. They gave a history of large breasts since puberty and a positive family history. Increased breast size occurred after pregnancy and lactation. Their main complaints were severe pain in the shoulder and back, respiratory problems during sleep, and unacceptable appearance.

The nipple areola was 35:40cm from the suprasternal notch and 24:26cm from the midline.

Its diameter ranged between 10:14cm. The breast reached the umbilicus or just above it in all cases.

All cases showed obesity or marked over weight, with an average height ranged between 160:170 cm.

Breast examination revealed no palpable masses, no palpable axillary lymph nodes which were confirmed by soft tissue mammography and ultrasonic breast examination.

### *Technique:*

The bipediced vertical de-epithelized flap was planned for all cases. The nipple areola was 12:14 cm from the midline, 22:24 cm from the suparasternal notch and 6:8 cm in diameter. The areas planned to be excised were the lower quadrants as well the lower and inner parts of the upper quadrants as shown in Fig. (1-A). The base of the upper and lower pedicle was designed to have the ratio of 1:3. The superior pedicle was 13:18cm with a base of 4.5:6cm. The lower vertical flap was 18:20cm with a base ranged between 6:8cm. After de-epithelization of the vertical flaps, excision of the planned breast tissues, adequate haemostatic measures, the nipple areola was moved upward and medially to be in its planned position. The infolded part of the upper vertical flap was sutured to the pectoral fascia. The flaps of the breast were sutured in two levels and a low suction drain was applied in all cases for 3:5 days. In 4 cases, blood transfusions were necessary to compensate for blood loss during operation or in the post operative period. Close medical supervision to the drain and the vital signs of the patient for 3:5 days were routine measures.

### RESULTS

In all cases neither haematoma nor infection occurred. All patients were satisfied by their new breast size and contour. There was complete symmetry to both breasts, as well as the nipple areola

that also showed symmetry in shape, size, level and position. Nipple areola showed superficial loss of its lower half in one case only. After one month it became hypopigmented as its regeneration was completed by conservative treatment and frequent dressings. All cases regained full sensation in the next 3:6 months, except one which showed complete sensory loss that never regained, this

case had presented with sever mammary hypertrophy. A common comment was about the long sub mammary transverse incision, although they were been notified about it during planning for operation. Although, a mild breast ptosis occurred after one year in 10 cases, yet the new breast size and contour satisfied them [Figs. (1-A,B), (2-A,B) & (3-A,B)].



Fig. (1-A): Preoperative design for reduction mammoplasty by bipedicle vertical dermal flap in a large breast.



Fig. (1-B): Postoperative view after reduction mammoplasty by bipedicle vertical dermal flap.



Fig. (2-A): Preoperative view of large breast.



Fig. (2-B): Postoperative view after reduction mammoplasty by bipedicle vertical flap.



Fig. (3-A): Preoperative view of very large breast.



Fig. (3-B): Postoperative view after reduction mammoplasty by bipedicle vertical flap technique.

## DISCUSSION

The problems presented with severe mammary hypertrophy limited the choice between different techniques. Nipple areola graft had the highest rate of loss with complete sensory absence [2].

Superior medially based reduction mammoplasty has a limited pedicle that interferes with breast size and contour. It exerts its effects in mastopexy and moderate large breast but not severe one [1].

The inferiorly based reduction mammoplasty has the disadvantages of flattened upper quadrants and disturbed sensation of the nipple areola complex. Also the incidence of nipple areola loss is high especially in very large breasts [5].

In our work, the use of bipedicle vertical dermal flap reduction mammoplasty technique [3] provided the advantages of symmetrical breast, symmetrical nipple areola size and shape. Also both nipples were at the same level. The complications of disturbed vascularity and sensation had lower incidence with this technique compared with others.

The ability to reach the recommended size, projection and contour were important factors during planning for reduction of very large breast. Still very long sub mammary transverse incision

and mild post operative ptosis present disadvantages to this technique.

We considered the geometrical planning and the calculation measures are the most important advantages of this technique as they prevent asymmetrical breast and disturbed nipple areola complex level.

### Conclusion:

We concluded that bipedicle vertical dermal flap is a recommended technique as regard planning for reduction of very large breast.

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