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Reduction mammaplasty with Rotation of the Glandular Flap to the Superior Pole

Ewaldo Bolivar de Souza Pinto, Ana Paula Pimentel Spadari, Ilson Abrantes Rosique, Roosevelt Santos Oliveira Jr., and Priscilla Chiarello de Souza Pinto Abdalla

### 12.1 Introduction

The need to eliminate some of the extensive scars leads after surgery to the development of techniques with smaller incisions (de Souza Pinto et al. 1994). Reduction mammoplasty, with a vertical approach, is now more common, because it combines the improvement of the shape with a minor scar (Bozola 1982; Lejour 1994; de Souza Pinto et al. 1994).

Vertical mammoplasty allows minimal incision, good projection, and a better result throughout time, in comparison with an inverted T technique (Bozola 1982; Lejour 1994; de Souza Pinto et al. 1994).

The breast tissue can be excised without a large incision after careful liposuction improvement (Lejour 1994; de Souza Pinto et al. 1994), especially on the superficial layers, which is to be accomplished in any corporal region allowing skin retraction postoperatively (Avelar and Illouz 1986; Pitman 1993; de Souza Pinto et al. 1995).

Sociedade Brasileira de Cirurgia Plástica

(Brazilian Society of Plastic Surgery)—SBCP, Santos, SP, Brazil

Dr. Ewaldo Bolivar de Souza Pinto Plastic Surgery Service, São Paulo, SP, Brazil e-mail: ewaldobolivar@uol.com.br Liposuction has been acknowledged to be a good supporting technique for the removal of adipose tissue in both regions, which contributes to new remodeling (Avelar and Illouz 1986; de Souza Pinto et al. 1995). The purpose of this study is to show that the association of two modern techniques (vertical mammoplasty and superficial liposuction) allows for good aesthetic results in the patients (de Souza Pinto et al. 1994).

## 12.2 Method

#### 12.2.1 Surgical Technique

We performed the marking of the inframammary fold, axillary, and thoracic regions in the orthostatic position, under light general endotracheal anesthesia, preceded by an adequate topical spray of lidocaine before intubation. The patient is kept in the semi-sitting position after completing the intubation procedures (Ribeiro 1989).

In a sequence, two notches are marked in the midclavicular line placed at 7 cm from the sternal furcula, depending on the thoracic width (Peixoto 1980; Pitanguy 1967; Ribeiro 1989). These notches give continuation to a perpendicular line that goes beyond the nipple as far as the inframammary fold (PDE 1994; de Souza Pinto et al. 1994).

E.B. de Souza Pinto, M.D. (🖂)

A.P.P. Spadari, M.D. • I.A. Rosique, M.D.

R.S. Oliveira Jr., M.D.

P.C. de Souza Pinto Abdalla, M.D.



Fig. 12.1 (a) Markings. (b) Index finger maneuver. (c) Bidigital maneuver. (d) Points B and C. (e) Point D. (f) Marking inverted drop

After this, four extra notches are made.

- A: index finger maneuver corresponds to an inframammary fold projection, usually at distance ranging from 18 to 21 cm (Pitanguy 1967).
- B and C: medial and lateral of the nipple-areola complex, following an imaginary line approximately 1 cm below the nipple.

The distance between B and C is not supposed to go any further than 8 cm, especially if glandular hypertrophy exists. We always pursue confirmation of these two notches by measuring them using our hands, which should correspond in extent to the tissue to be removed.

 D: the lower marking, 5 cm above the inframammary fold at the projection of the midclavicular line.

To be more precise, we draw an ellipse by connecting A, B, C, and D, in an inverted drop (Fig. 12.1).

We initiate surgery by infiltrating axillary and thoracic regions in superficial and deep layers in a tumescent form with a standard solution along the afore-mentioned inverted drop, averaging 150 mL.

In sequence, we perform liposuction of the fat tissue with 4- or 5-mL perforated cannulas, from deep to superficial layers (Fig. 12.2).

Almost immediately, we notice the improvement of the mammary contour, with tissue retrac-



Fig. 12.2 Liposuction

tion. We then mark a new areola and proceed with Schwarzmann's maneuver as far as approximately 1 cm below the line that connects B and C (Fig. 12.3).

Below this line, we perform a conical resection, perpendicular to the thorax (Fig. 12.4).

Next, the flap of the glandule is made by maintaining the superior pedicle (Fig. 12.4), aimed at increasing the upper mammary pole. This flap has the form of an inverted U, with the base near the thorax wall. When released, it revolves on its own axle, and then it is sutured onto the second or third costal arch, with to 2-0 mononylon (Figs. 12.4 and 12.5). After hemostasis, the pillars are approached with three stitches using 2-0 mononylon. In the event of patients with a significantly laterally ptotic glandule, we mark the remaining skin with methylene blue, so that it can be resected, bearing in mind that the inferior extremity goes no further than 1 cm above the inframammary fold.



Fig. 12.3 Schwarzmann's maneuver

With upward breast traction, the closure begins with 4-0 non-absorbable sutures in the caudo-cranial direction and the final continuous intradermic sutures (de Souza Pinto et al. 1994).

A new areolar site is made with no tension, the suture is continuous with the 5-0 non-absorbable Gillies stitches. We often use a tubular drain for 24 h (Fig. 12.6).

# 12.3 Discussion

In cases treated with this technique, we observed a reduction of breast volume of 150 to 1000 g, maintaining the conical shape without changing the glandular function. The upper pole is maintained because we made a glandular flap (de Souza Pinto et al. 1994).

The superficial liposuction promotes a retraction of the skin generating a more harmonic contour in the inferior, medial and axillary pole.



Fig. 12.4 (a) Conical resection. (b) Making a flap. (c) The flap



Fig. 12.5 (a, b) The inverted U form of the flap and rotation

This technique can be performed in cases of mild (grade I) to severe hypertrophy (grade IV), including cases of asymmetry and symmasty (Figs. 12.7, 12.8, and 12.9) (Avelar and Illouz 1986; Lejour 1994; de Souza Pinto et al. 1994, 1995).

## 12.4 Complications

Following the cases in this study, eight patients had scar tissue enlargement, one of which involved epitheliosis. We did not observe any cases of areolar necrosis or dehiscence of the surgery wound.



Fig. 12.6 (a, b) Tubular drain



Fig. 12.7 (a, c) Preoperatively. (b, d) Five years postoperatively



Fig. 12.8 (a, c) Preoperatively. (b, d) Nine months postoperatively



Fig. 12.9 (a, c, e) Preoperatively. (b, d, f) Five years postoperatively



#### Conclusion

This technique comprises both breast reduction and harmonious mammary contours, in addition to maintaining the function and sensitivity. The form of the superior pole is also maintained owing to the flap. Superficial liposuction promotes skin retraction, both medially and laterally. It may be performed for different types of breasts, aiming for better results.

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