

Oncoplasty and mamoplasty

SMR Javadi

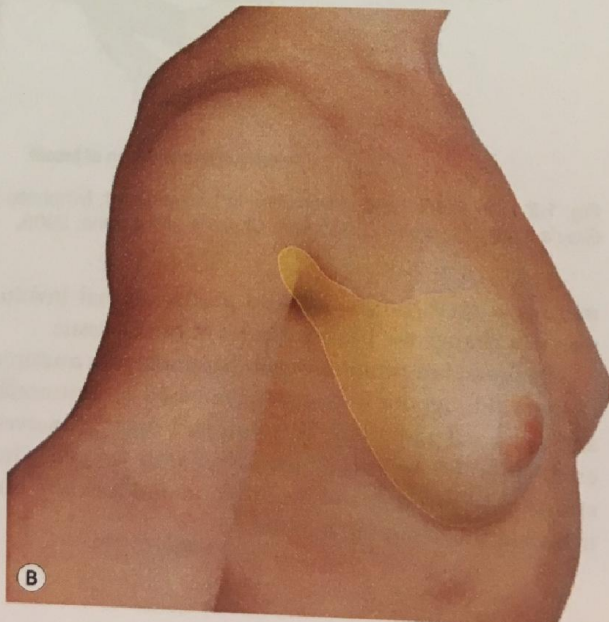
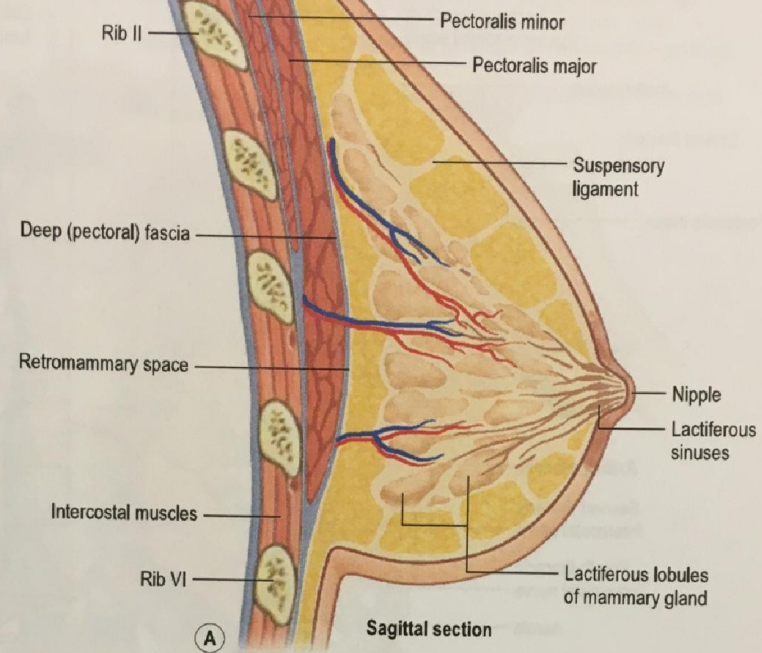
Breast surgeon

ORIGIN OF ONCOPLASTIC SURGERY

The term oncoplastic surgery was introduced in 1993³ and published a year later.⁴ It encompasses unique approaches suggested by different surgeons and focuses on tumor resection and breast aesthetics through partial breast reconstruction techniques that minimize potential breast deformities.

The initial focus of oncoplastic surgery was on breast deformities after quadrantectomy,^{5,6} and it became another alternative to consider during the initial surgical planning and decision-making process.

The adoption of breast conserving therapy as an acceptable alternative to mastectomy opened the door to a wide and varied range of partial breast reconstruction techniques. The term *oncoplastic breast surgery*, as suggested by Werner Audretsch in 1993,¹ describes the concept of local tissue rearrangement that would allow for wide resection of tumors while preserving or improving breast cosmesis. Although the term has



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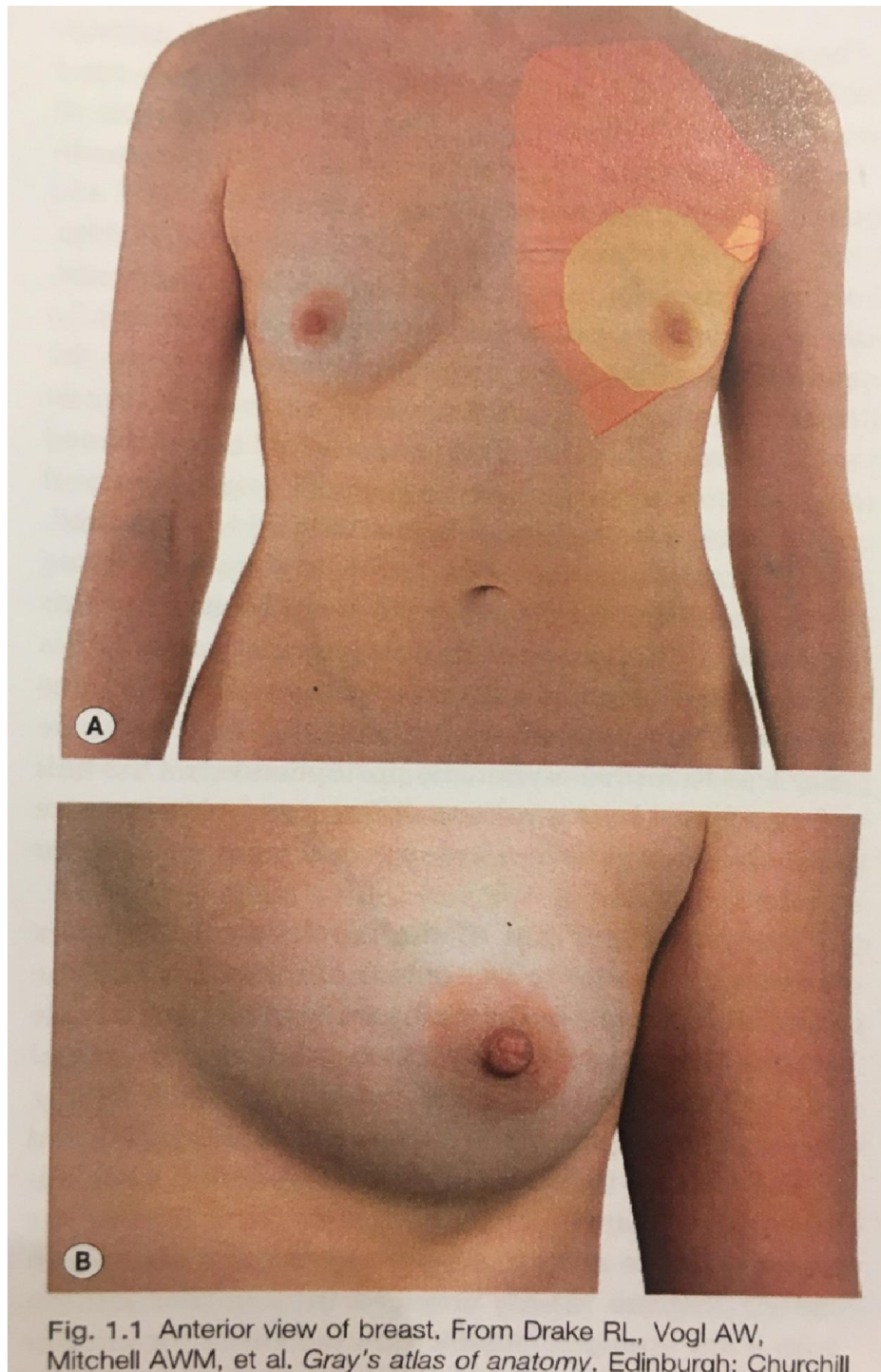
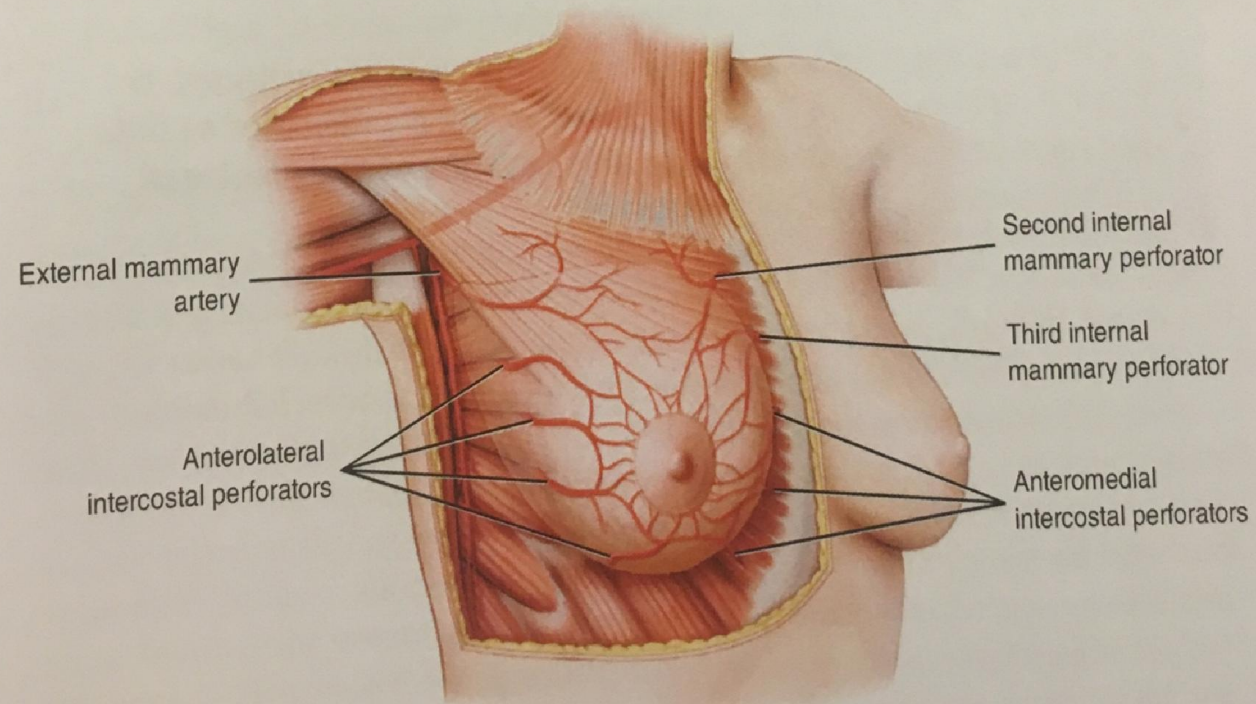
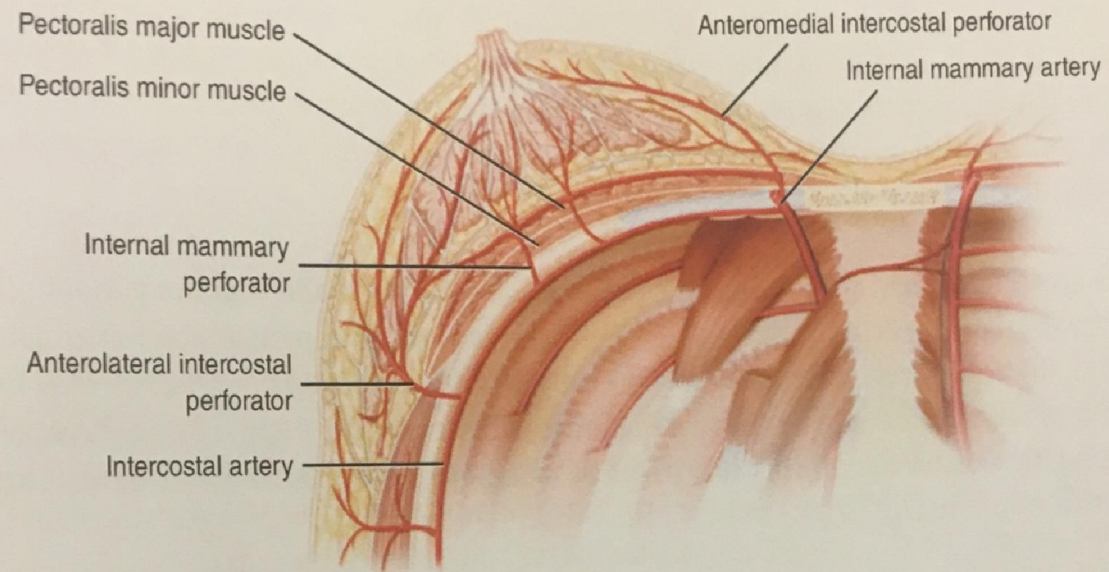


Fig. 1.1 Anterior view of breast. From Drake RL, Vogl AW, Mitchell AWM, et al. *Gray's atlas of anatomy*. Edinburgh: Churchill



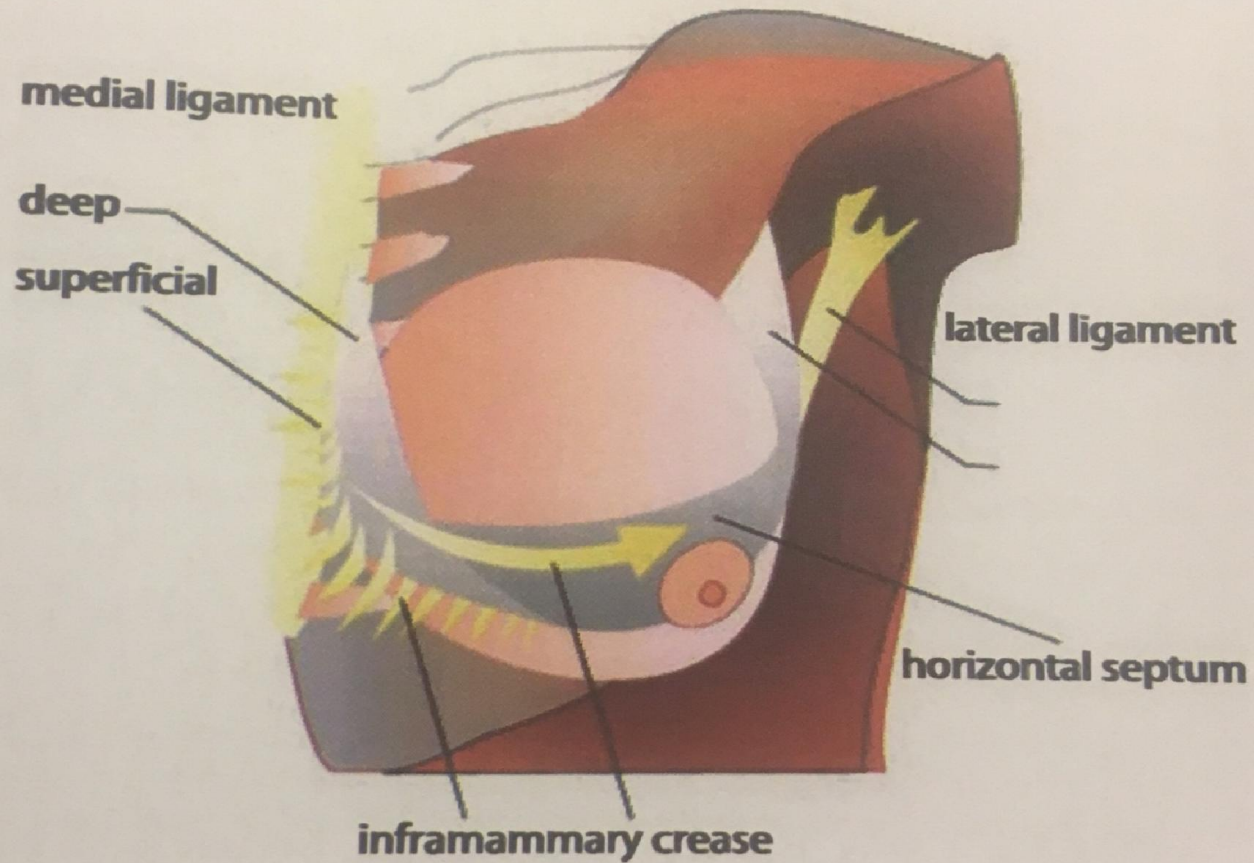


Fig. 1.4. Anterior view of left breast in schematic diagram showing the superficial (yellow) and the deep part (gray) of the ligamentous suspension

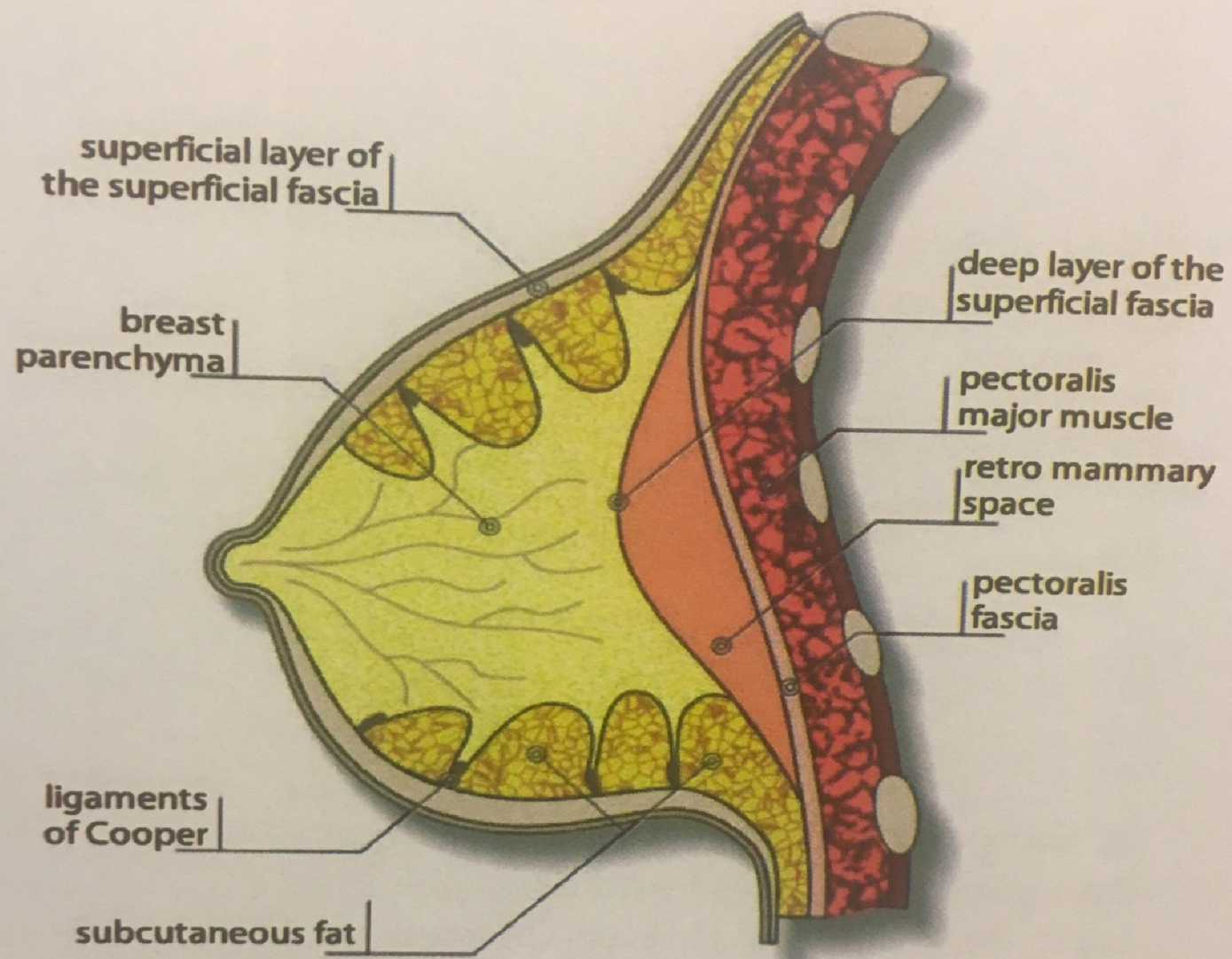


Fig. 1.1. Fascial system of the breast

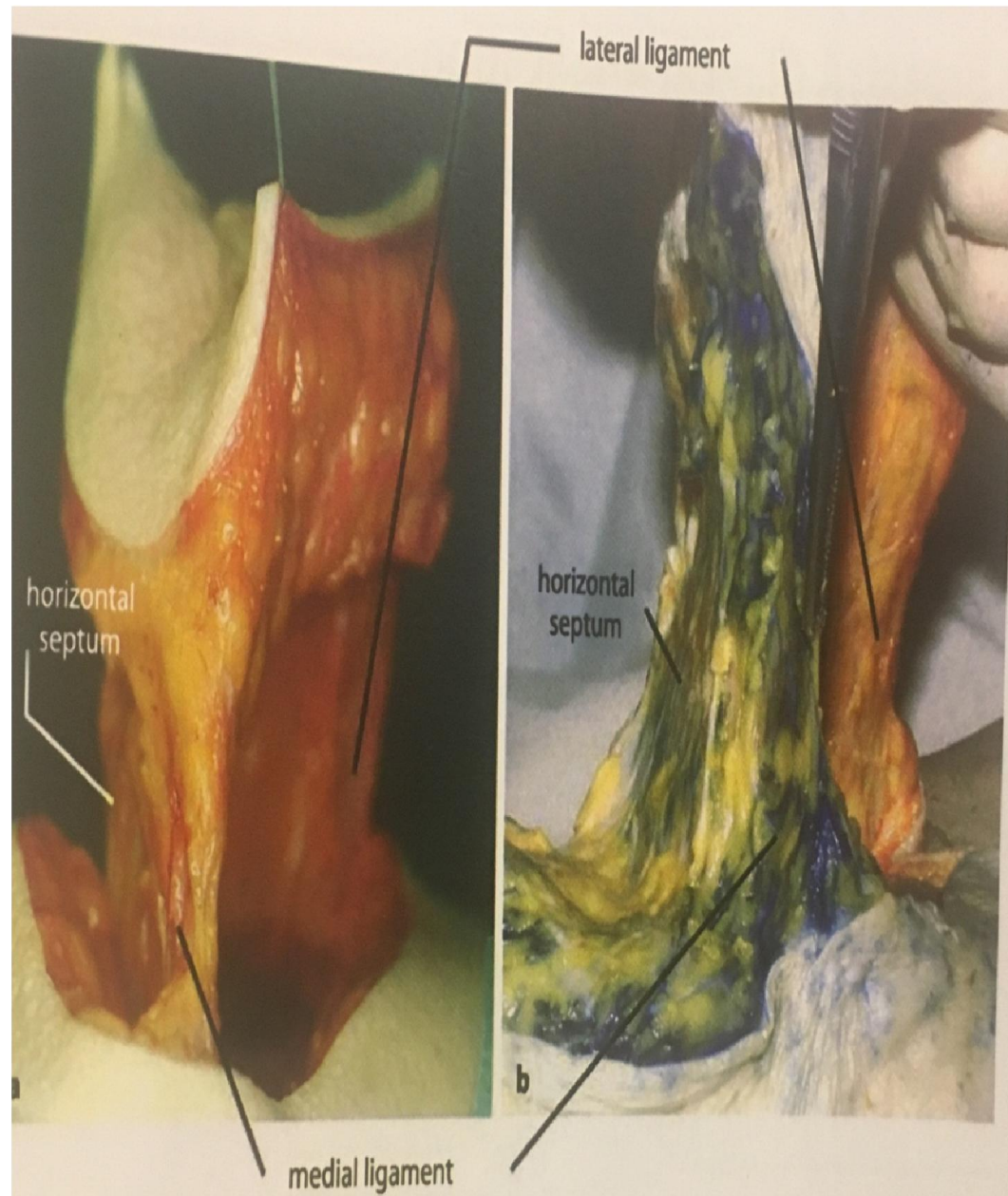
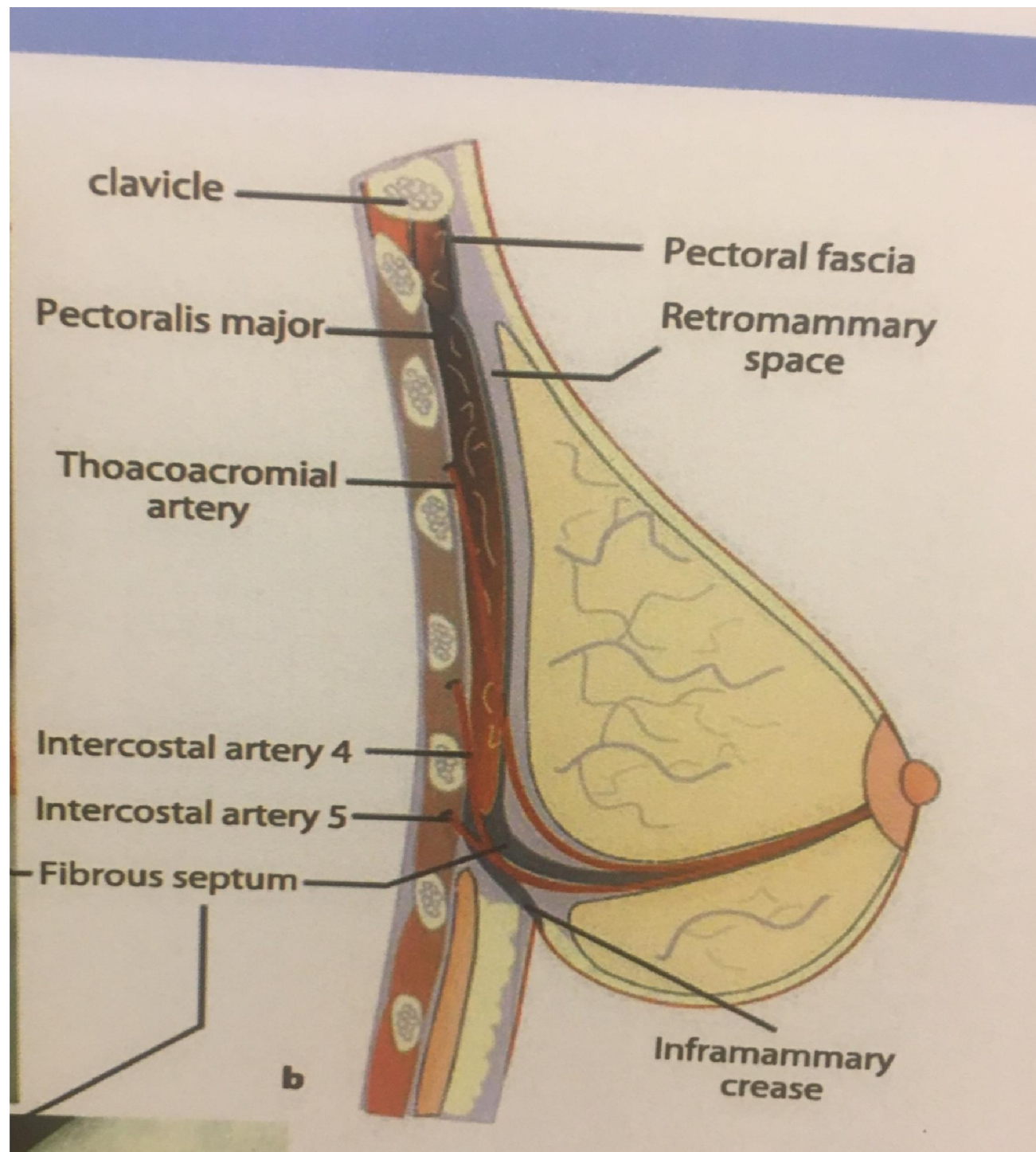
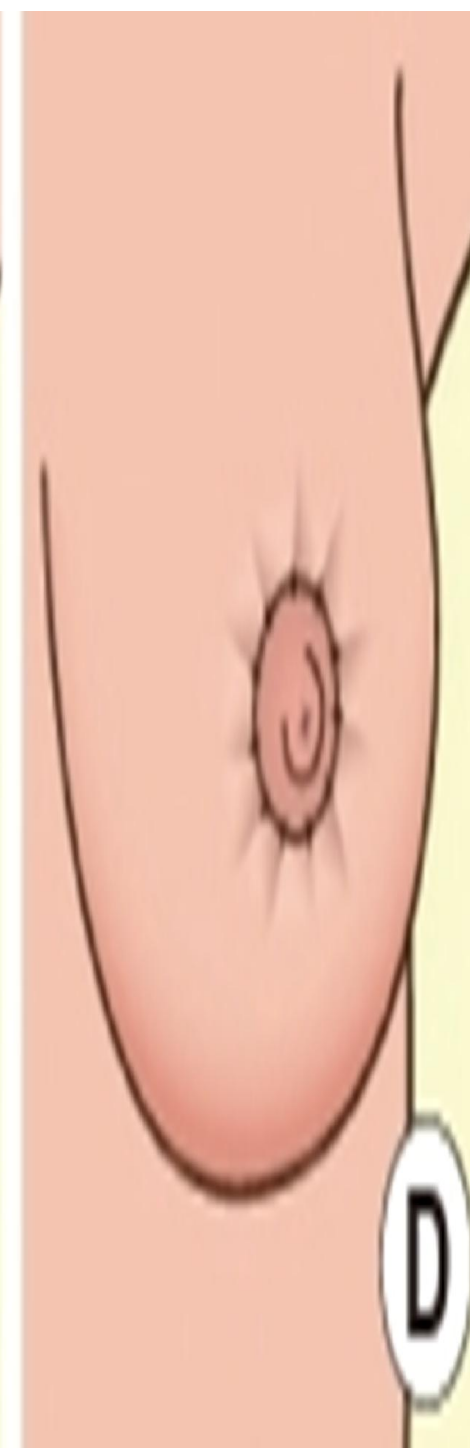
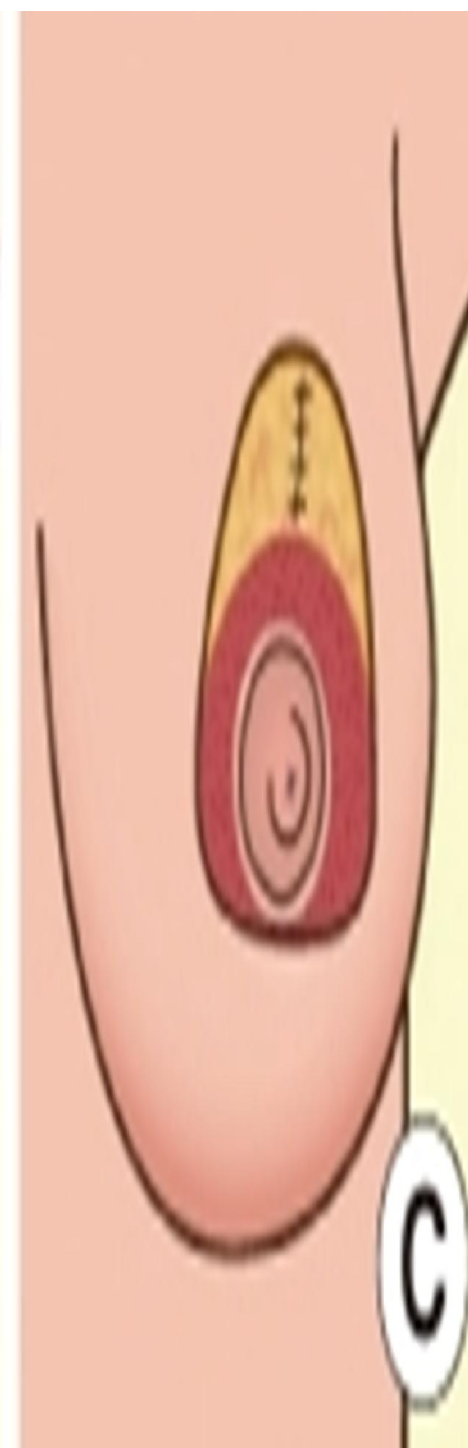
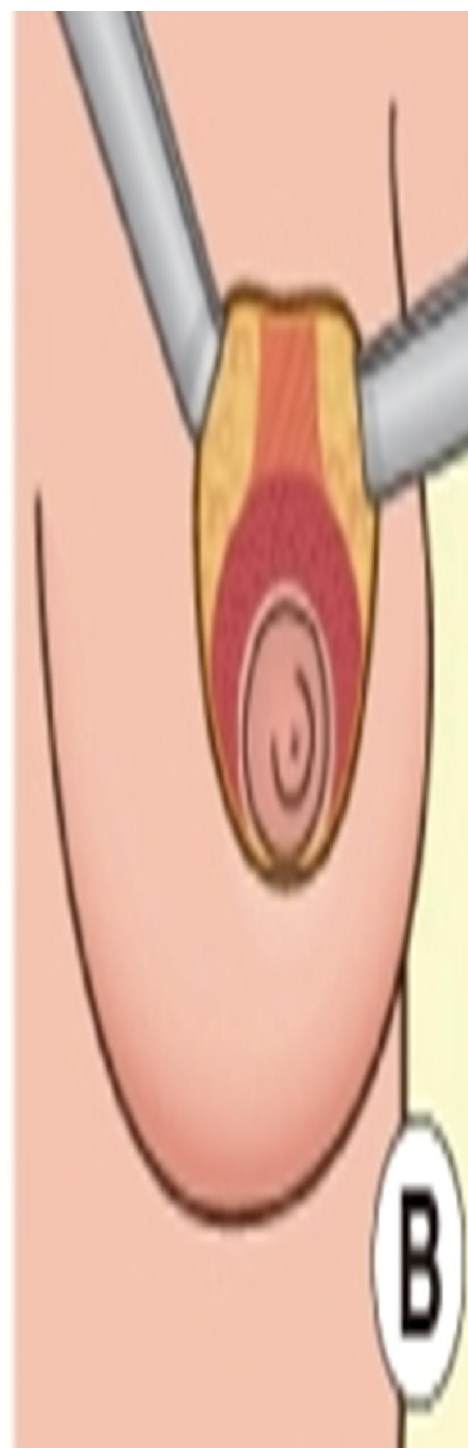
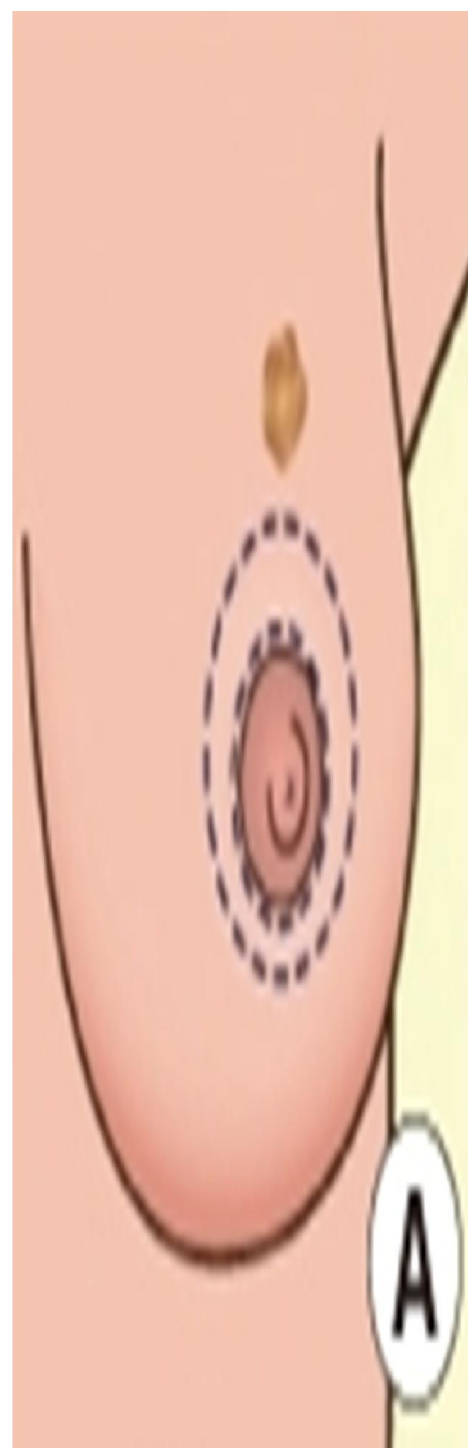


Fig.1.2. a The ligamentous suspension in anatomical dissection of the right breast seen from cranio-medial [21]. b Equal preparation after intraarterial injection of surgical ink into internal thoracic artery [2





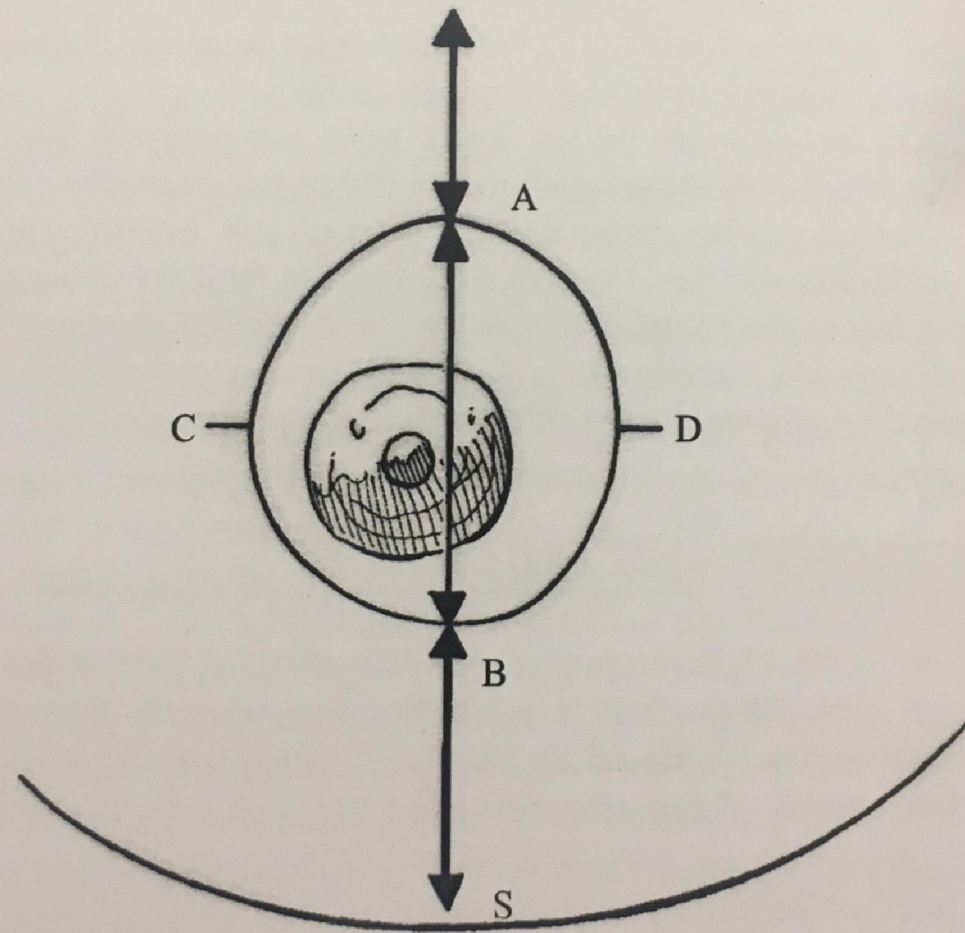


Figure 83.3. Skin marking. The four cardinal stitches should be selected to reduce the ellipse size to its minimum. A large amount of skin is needed to cover the glandular cone, and the skin will retract after surgery. Any skin over the resection can create serious complications. For descriptions of points A, B, C, D, and S, see text.

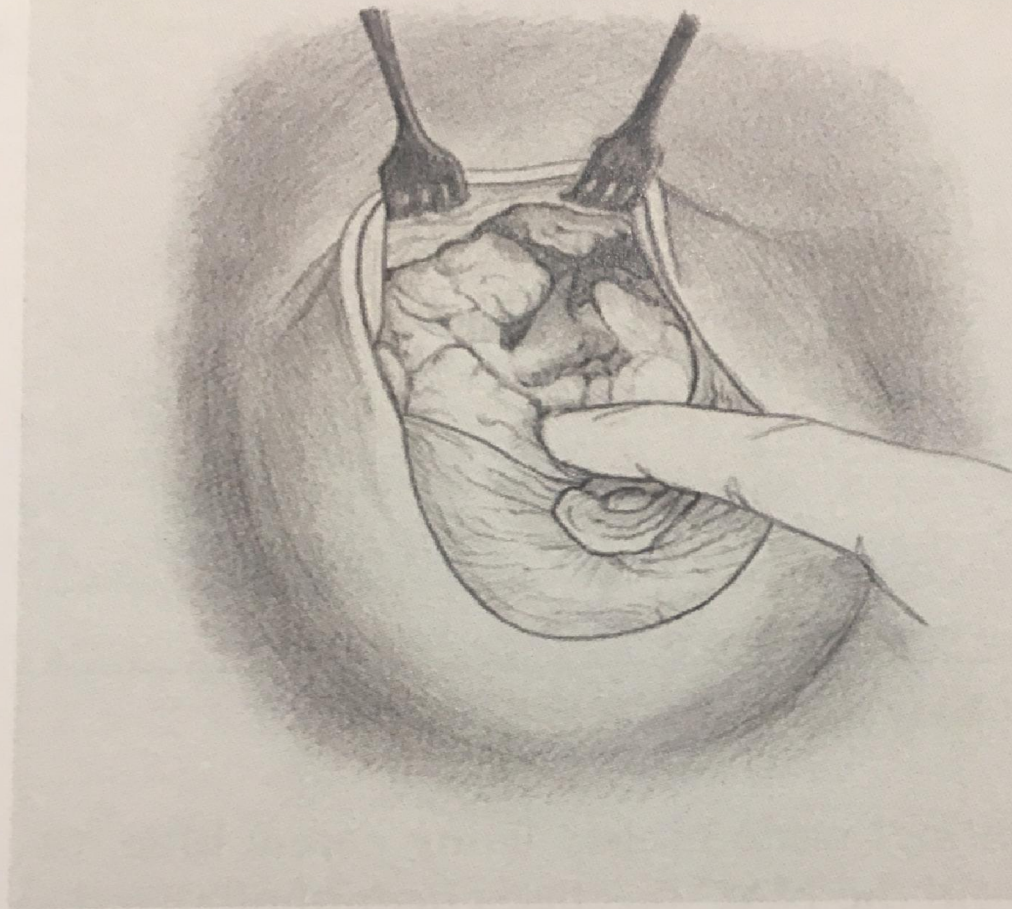


Fig. 4.2 This figure shows the defect after doughnut mastopexy and resection of the upper outer breast lump. On both sides of the defect, the breast parenchyma is not adequately freed from the skin and the pectoralis fascia. No sutures have been placed to approximate the breast lumps adjacent to the defect. This resulted in inadequate defect reconstruction

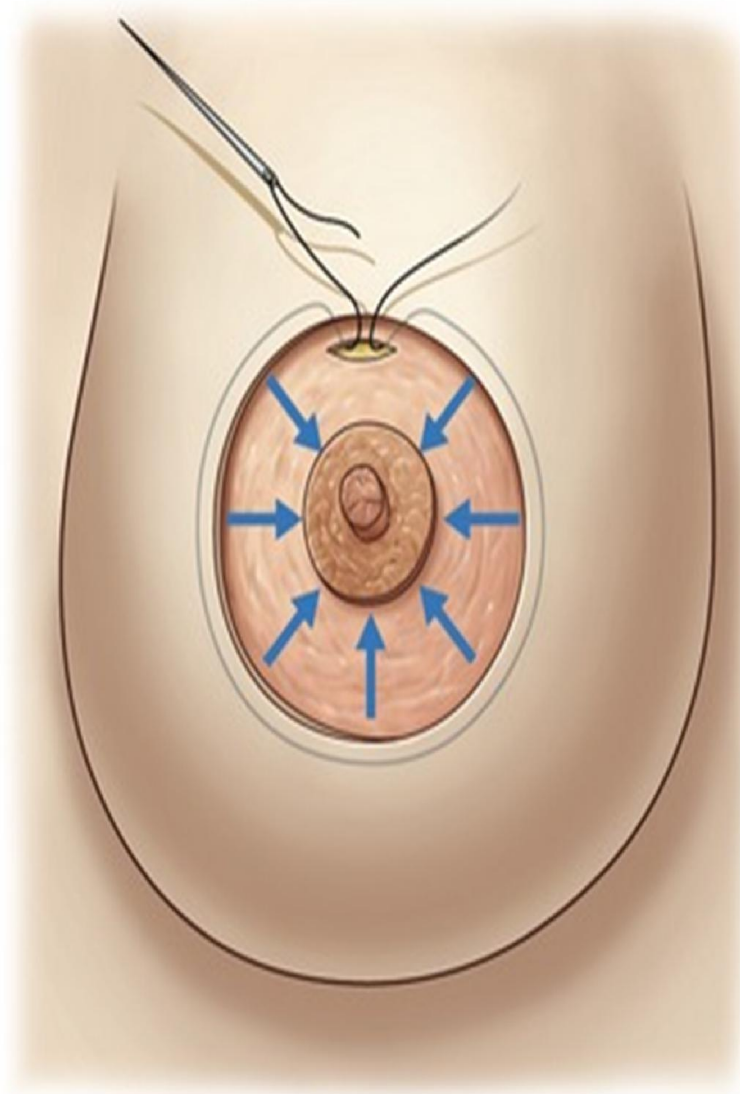




Fig. 4.3 Directly after closing the skin, there seemed to be a small defect within the breast







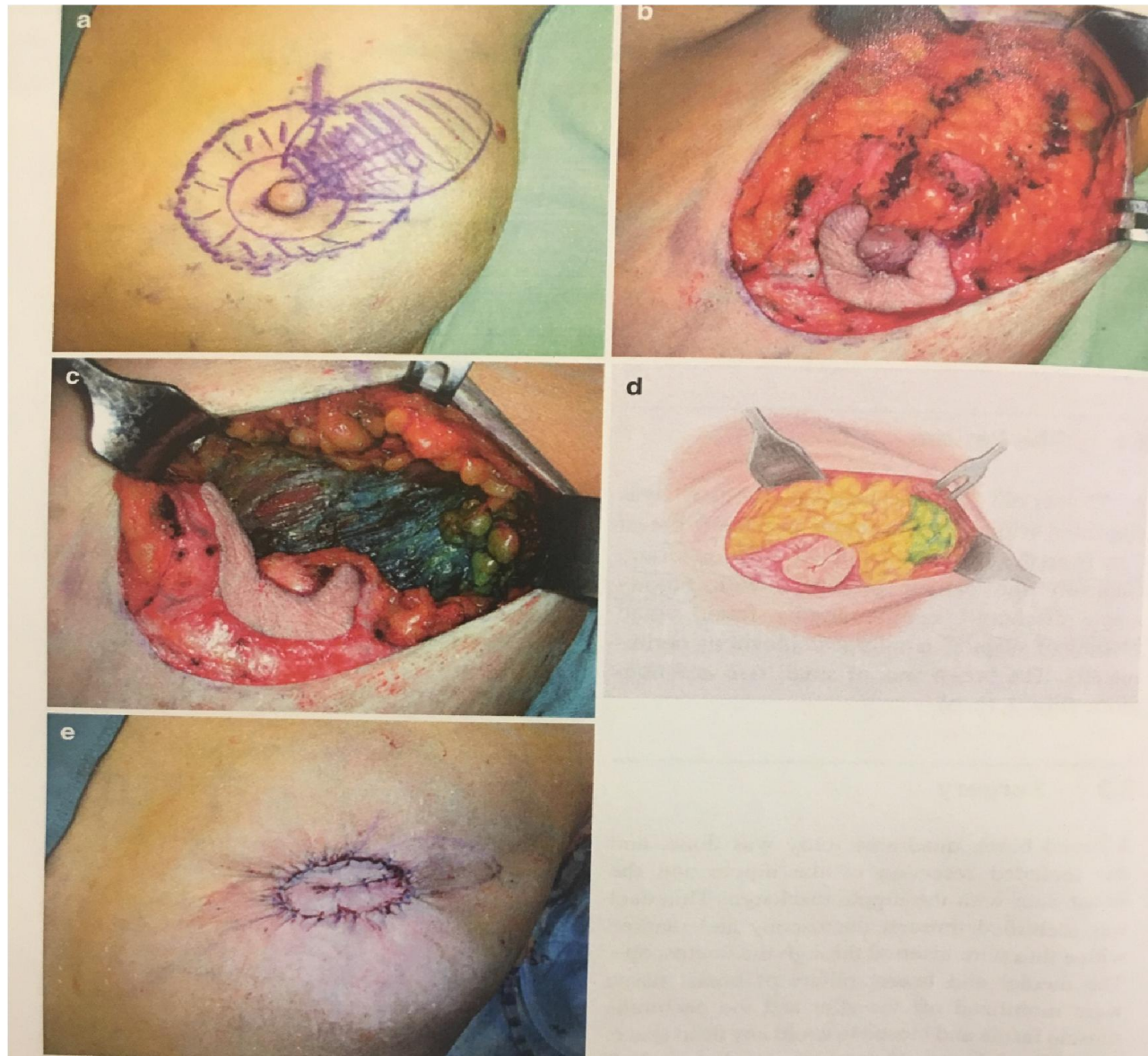


Fig. 3.2 (a–e) Intraoperative view. (a) The new areola is outlined (*inner circle*), another circular incision is in a 15 mm distance. The tissue and the nipple to be resected are outlined on the skin. (b) The subcutaneous tissue is dissected off the skin. The tissue to be resected is marked

on the breast. (c) The tumor is resected together with the nipple, and the skin of the areola is mobilized from the subcutaneous tissue. (d) The skin of the areola and the breast tissue are closed. (e) Immediate postoperative result













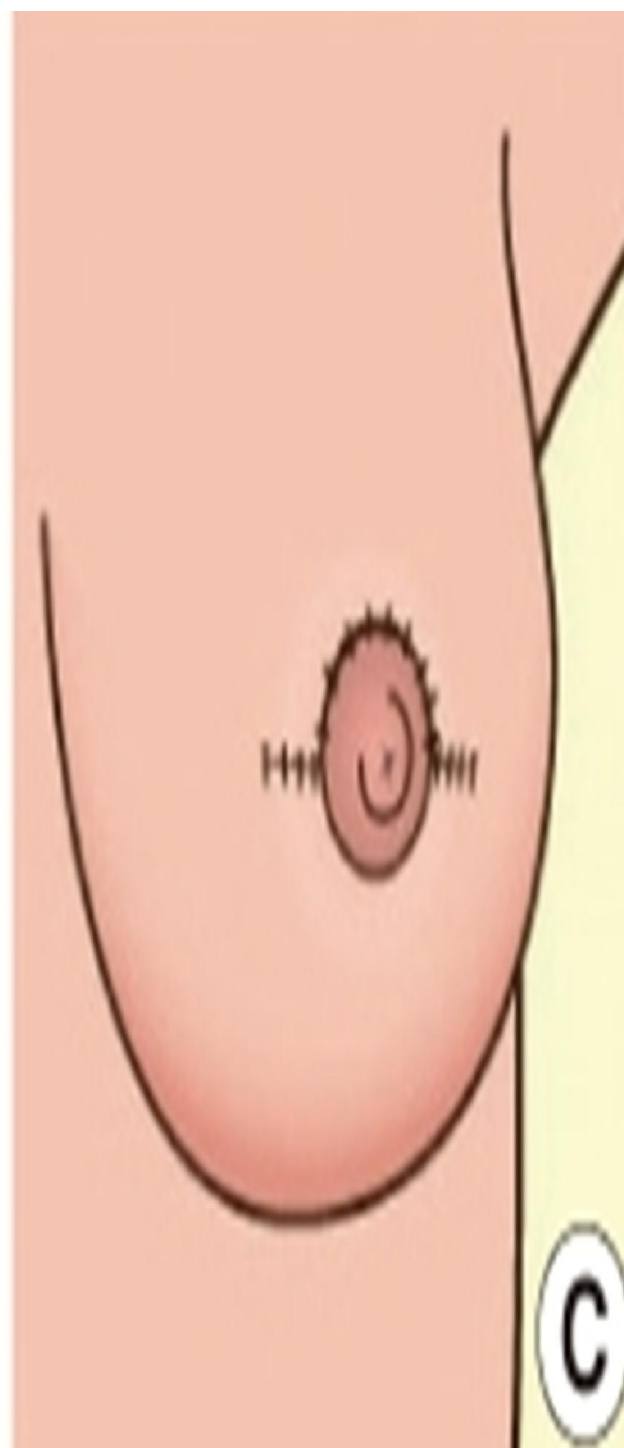
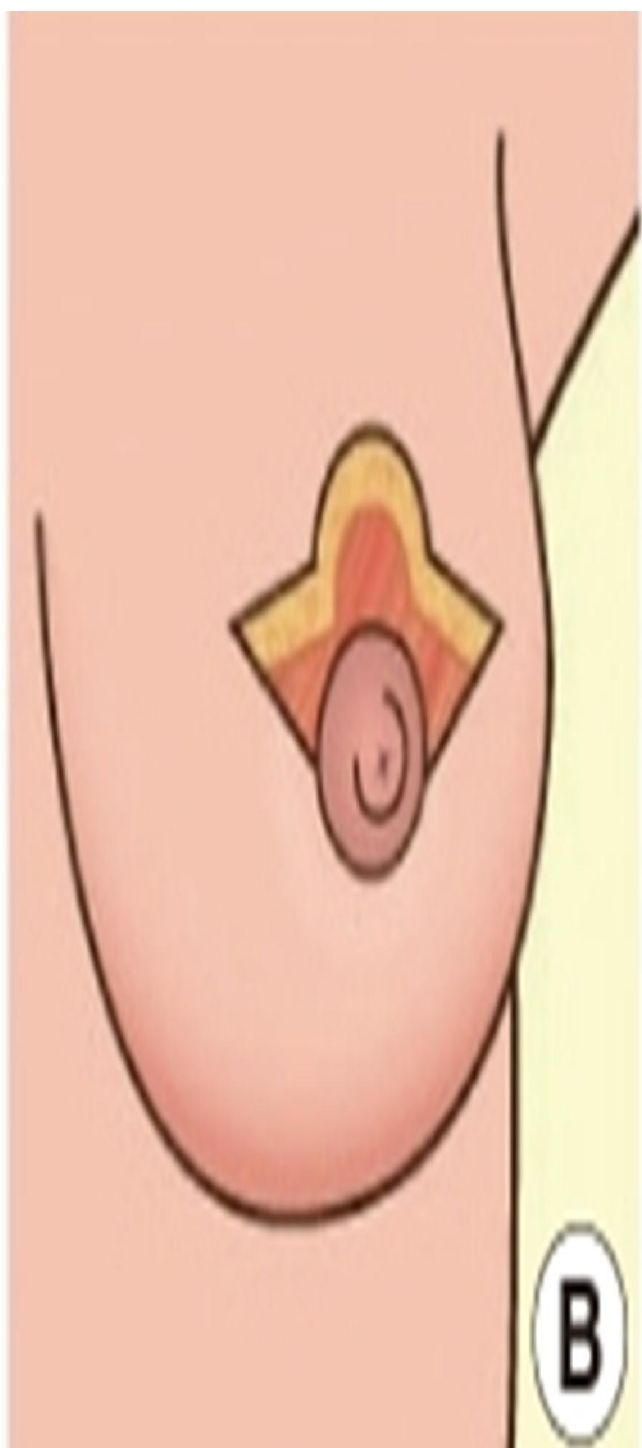
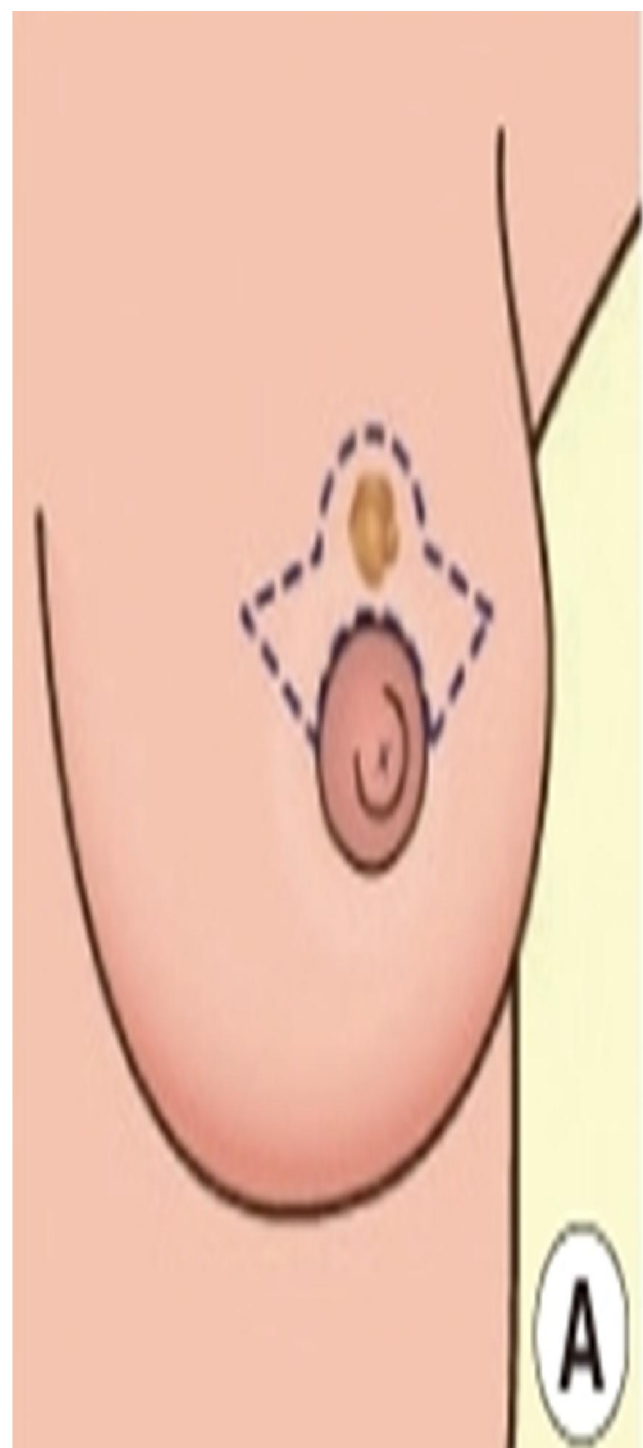




Fig. 6.1 Preoperative drawings are done with the patient sitting upright. The lateral drawing lines have to outweigh the round central diameter in length

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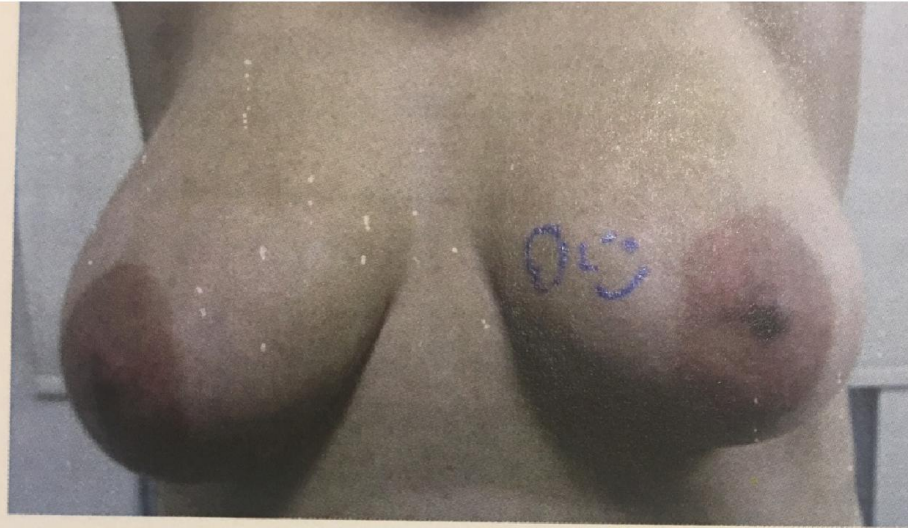


Fig. 7.1 The two lesions in the mediocranial part of the left breast

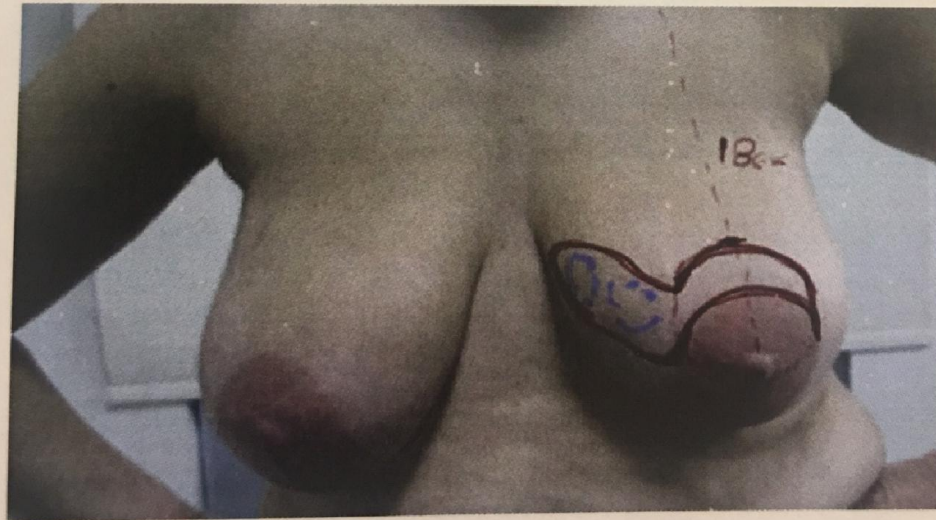


Fig. 7.2 Preoperative markings



Fig. 6.2 Preoperative drawing lines fully incised



Fig. 6.3 Defect closed

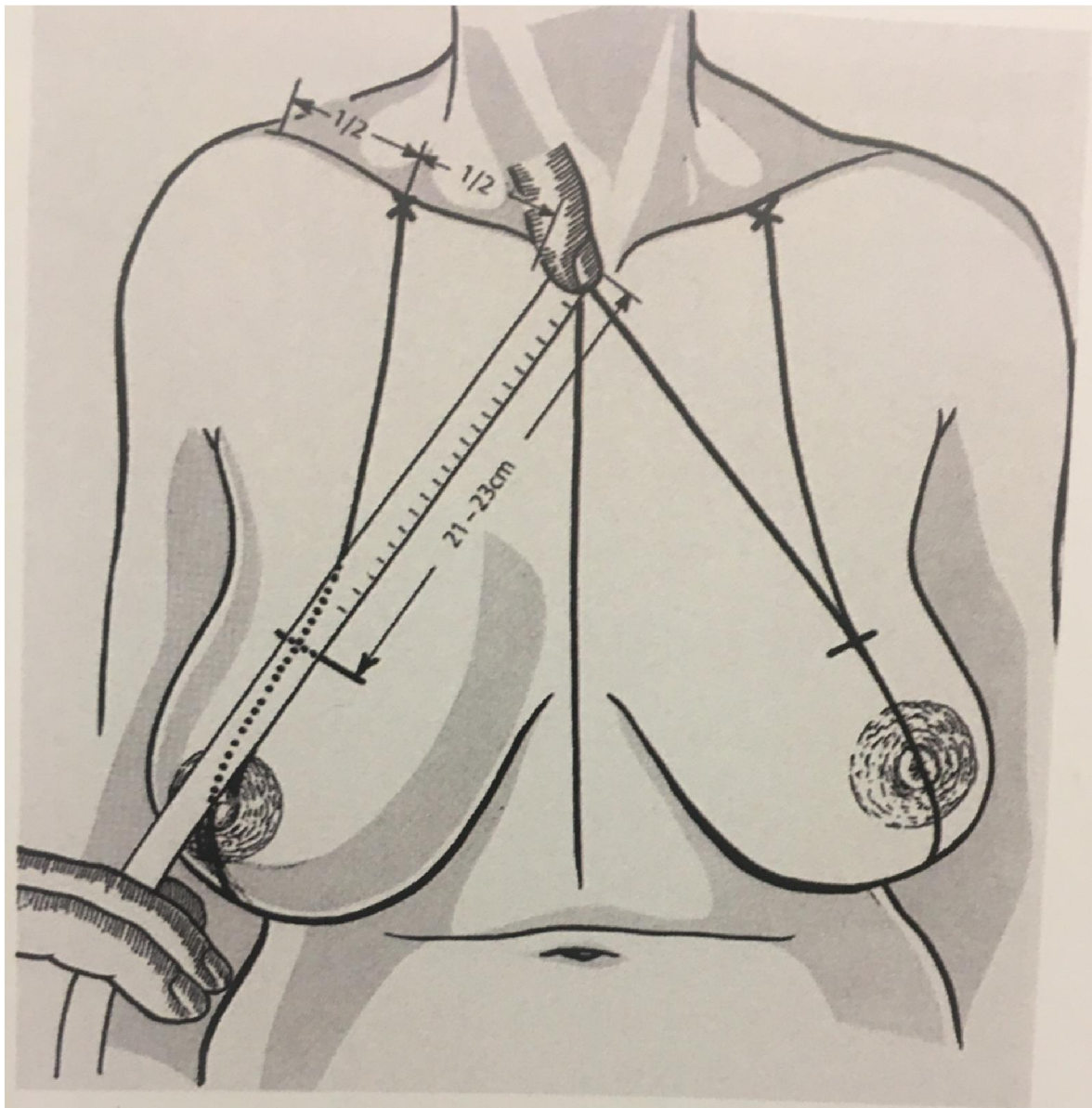
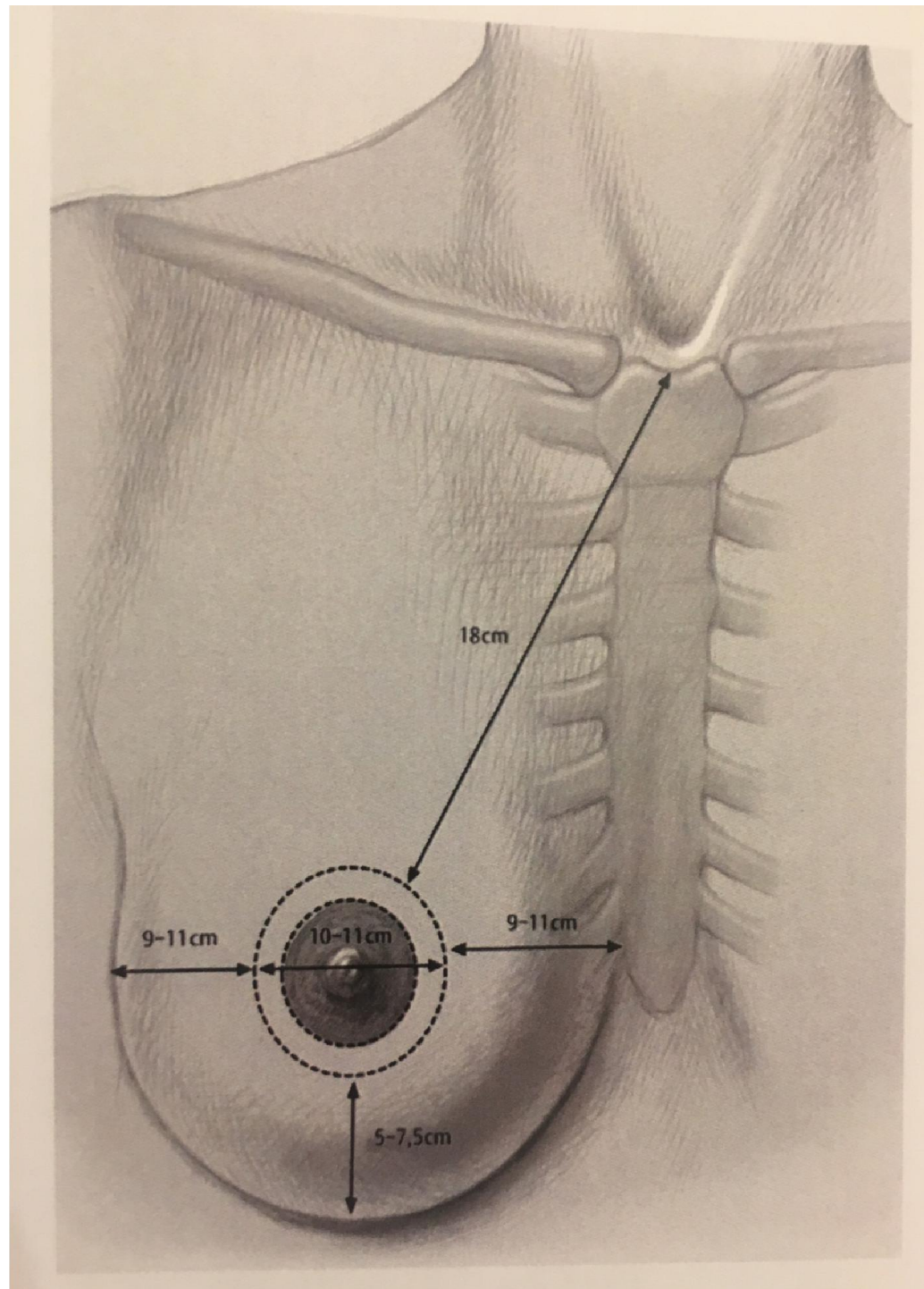
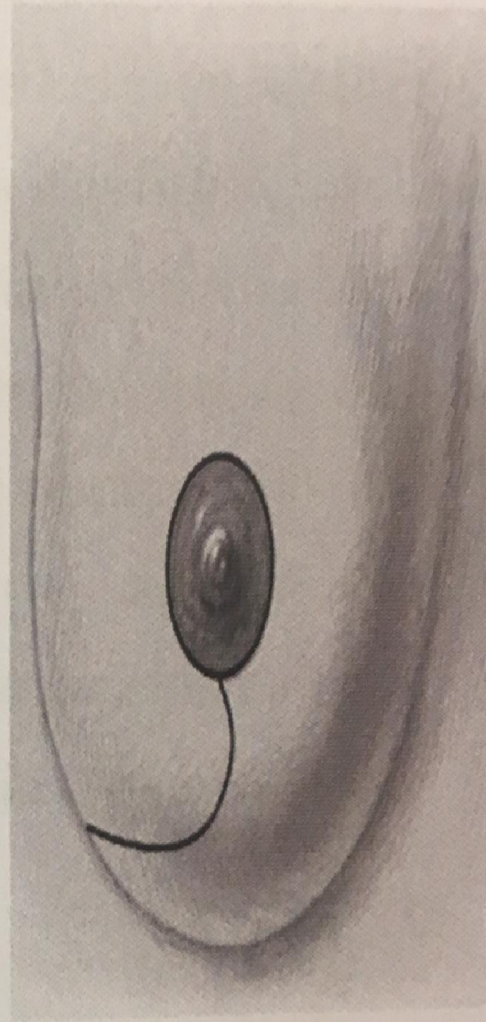
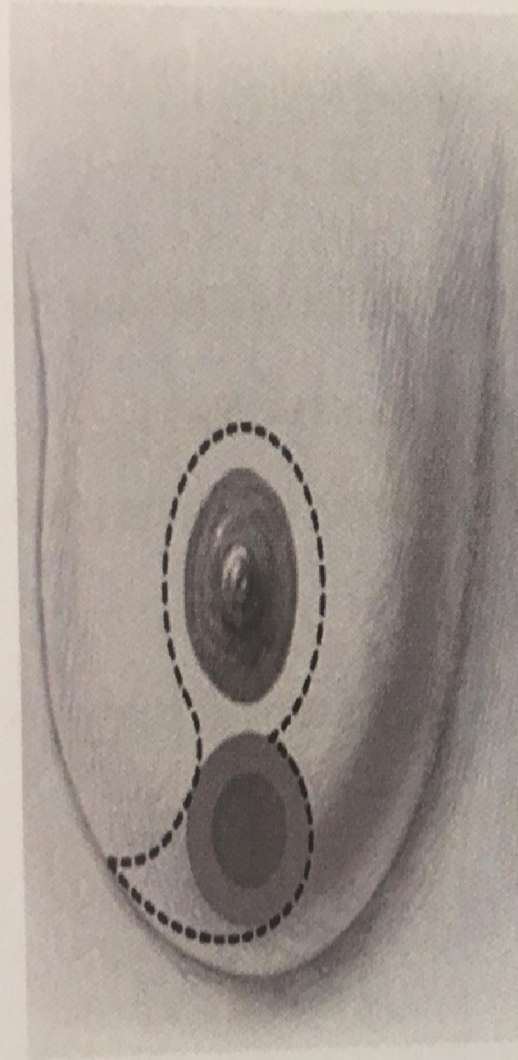


Fig. 1-11 The new nipple position on the midclavicular-nipple line is at an average distance of 22 cm from the sternal notch. This distance is not strictly fixed but gives an approxi-

mate position depending on the patient's age, breast size, and degree of ptosis, together with dorsal "impingement"; this is finally determined during surgery.



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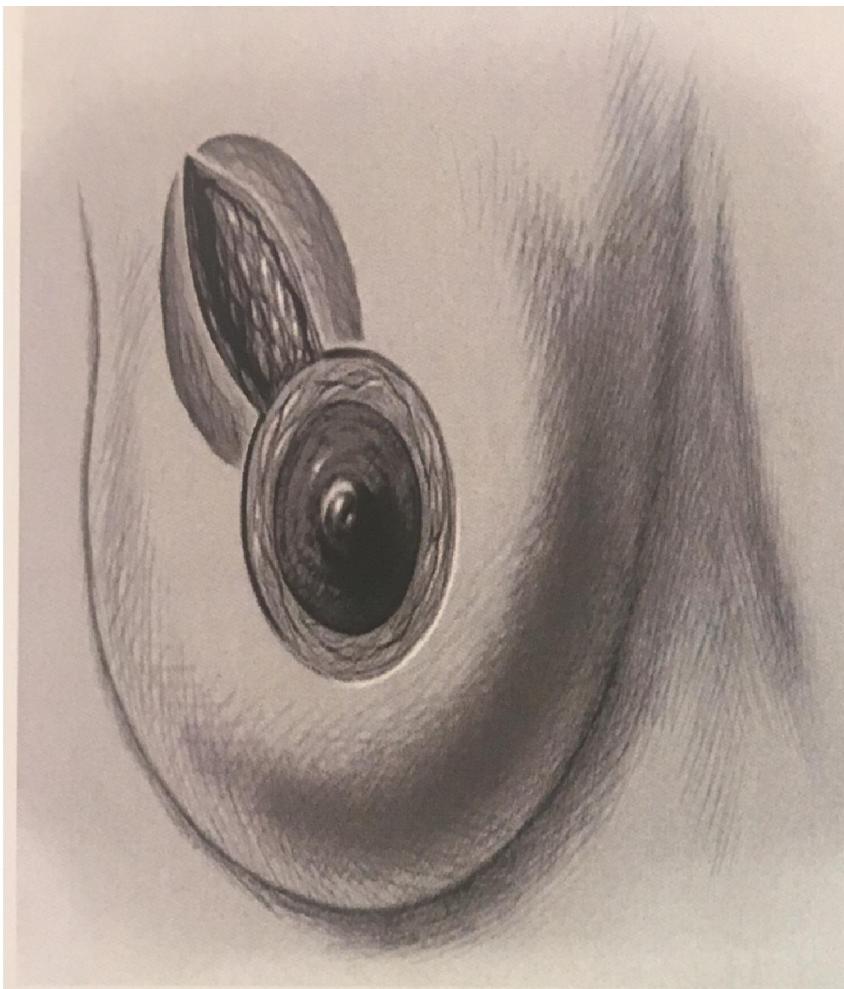


Fig. 3-36 One of the most useful and versatile incisions for tumors in the upper outer quadrant is a radial elliptical incision directly over the tumor (which avoids ugly distortion in the cleavage area) with periareolar de-epithelialization (to recenter the nipple-areola complex).

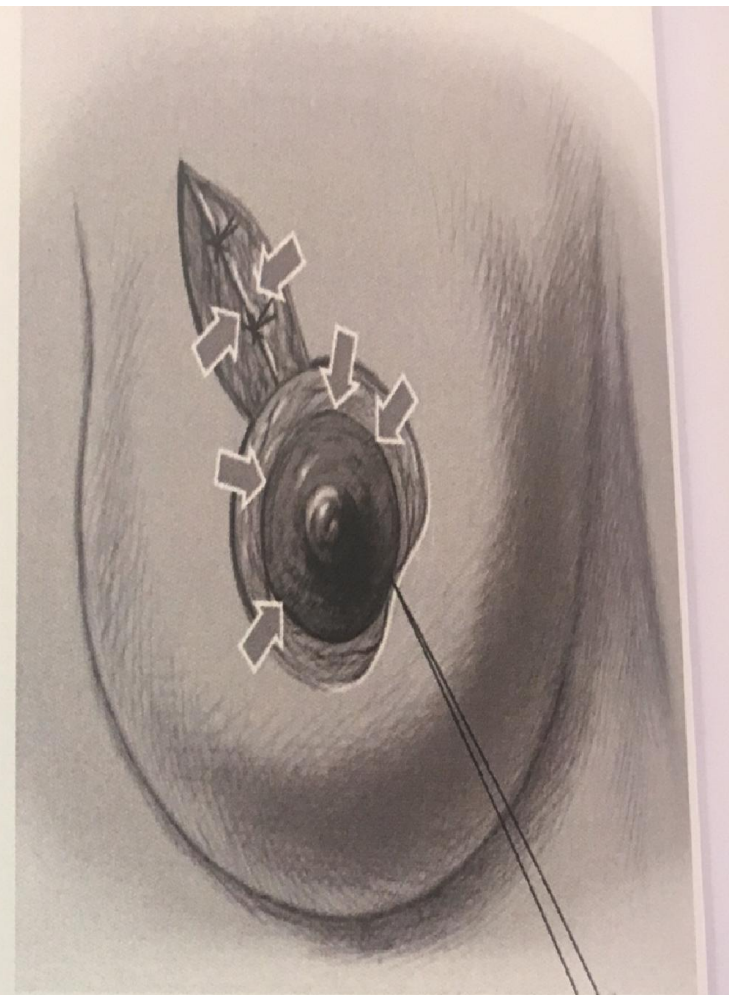
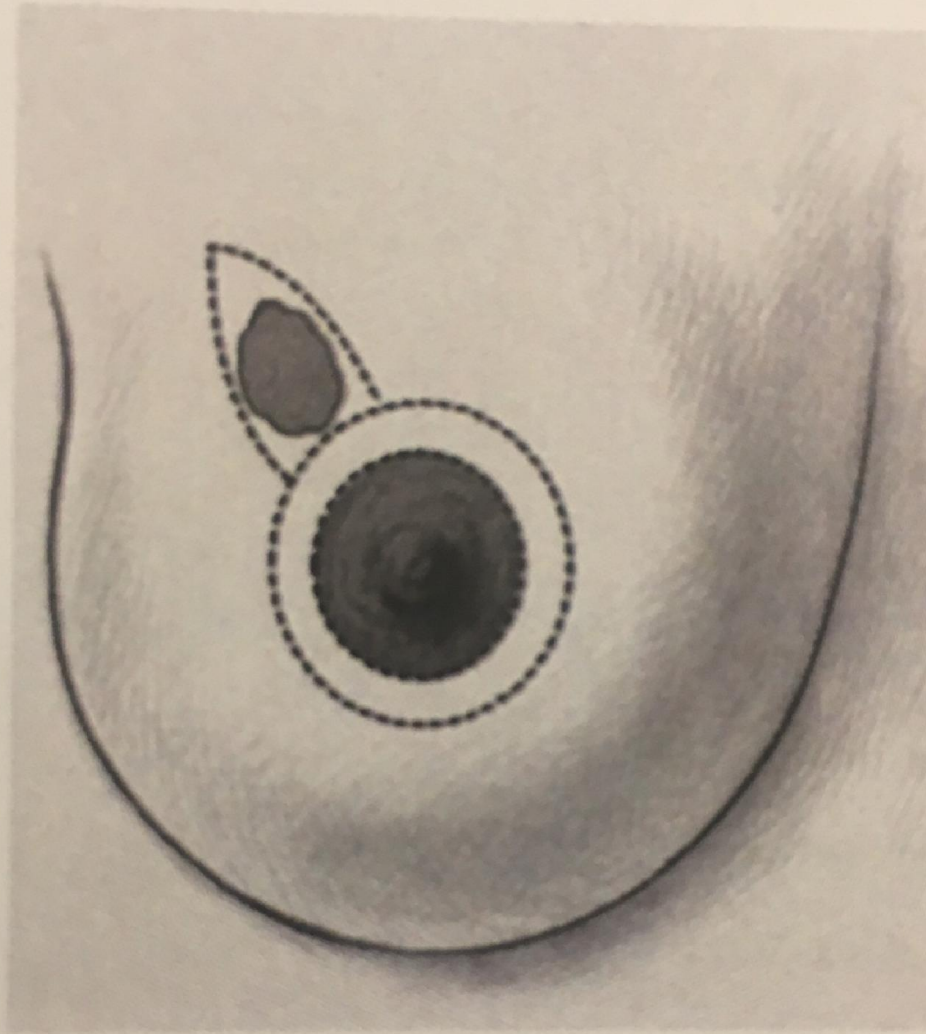


Fig. 3-37 Complete internal breast reconstruction after approximation of breast lobes. The routine steps that precede adequate intramammary mobilization are not shown: the breast must, for example, be mobilized from the skin and incised to achieve the necessary mobility; it is then rotated into the defect to fill it completely and reapproximated with interrupted Vicryl sutures. Finally, the nipple-areola complex is recentered and sutured in place with subdermal interrupted sutures. The skin is closed with an intracutaneous monofilament suture.

Surgical Repertory



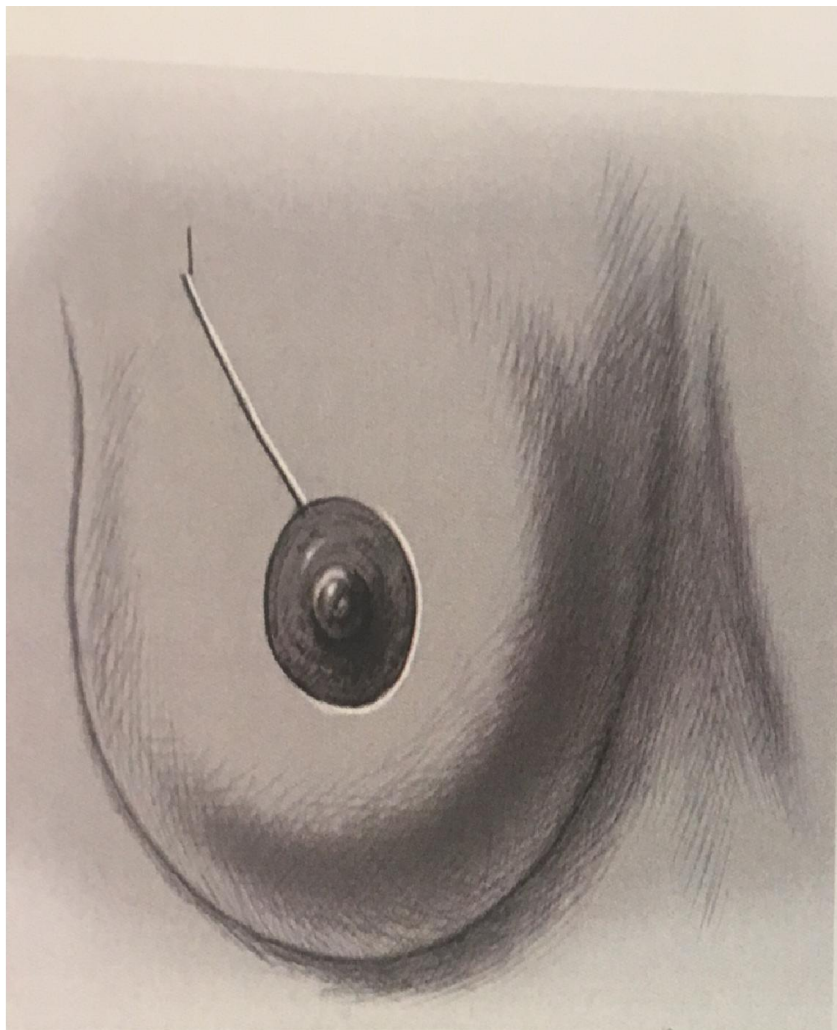


Fig. 3-38 Resulting scar after skin closure with monofilament suture. The exact position of the nipple-areola complex can be corrected at the end of the operation by extending the de-epithelialization pattern. The advantage of the chosen incision is that the scar is barely visible and there is no scar in the inner part of the

breast or cleavage area. By performing intramammary gland mobilization (Chapter 3.2.1), no defect due to scarring occurs after radiotherapy, which would be inevitable with radiation of an organized seroma or granulation tissue within the defect.

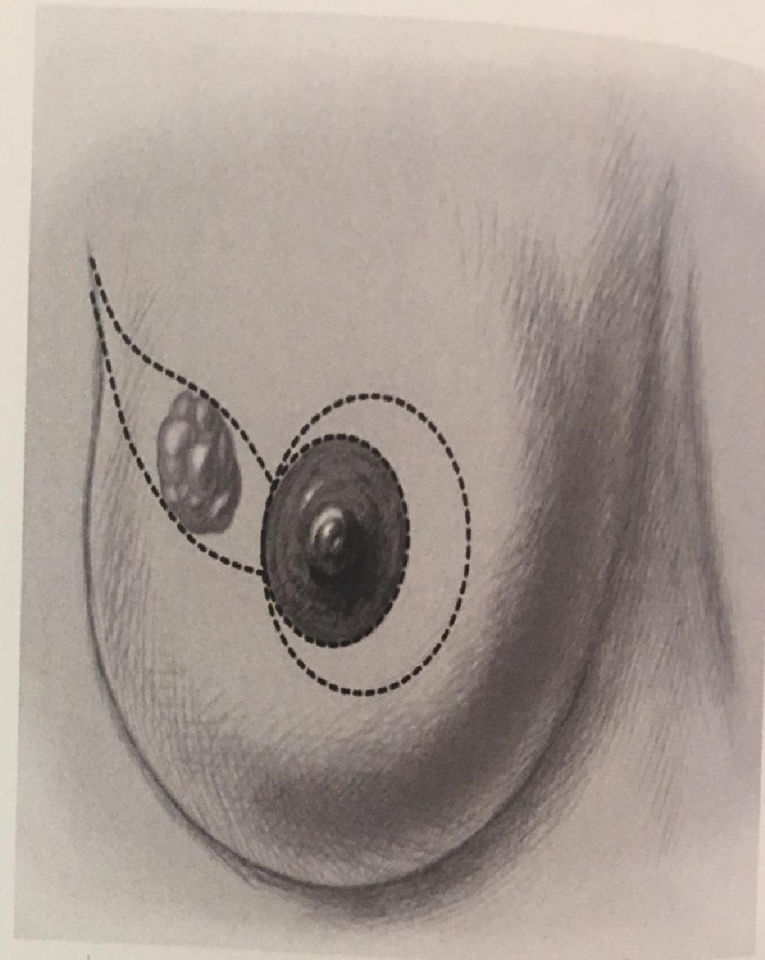


Fig. 3-39 Modified B-plasty II. Complex oncoplastic operations employ very similar strategies and approaches in both the choice of inci-

sion and intramammary approximation techniques.

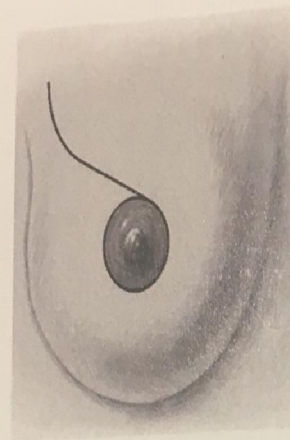
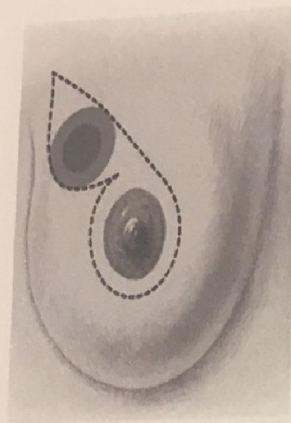


Fig. 1-19 In addition to the previously illustrated options, the classic B-plasty incision has a number of surgical variants.

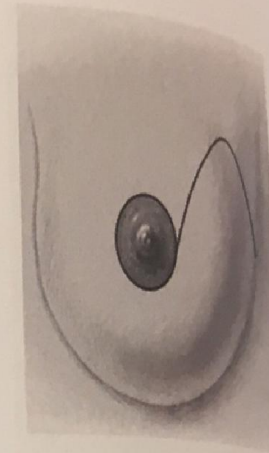
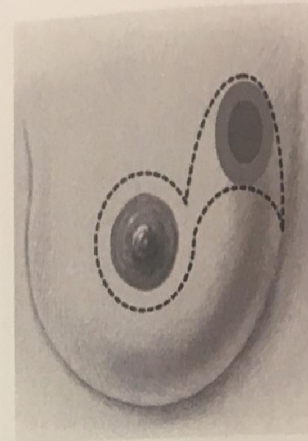


Fig. 1-20 The principle is always the same and varies only according to tumor size, tumor location, and the relationship between breast and tumor size.

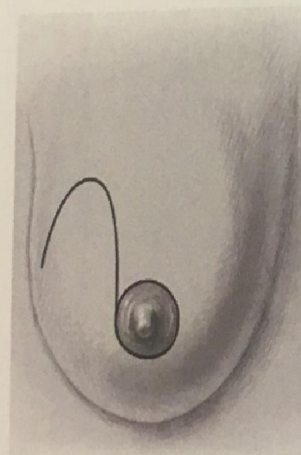
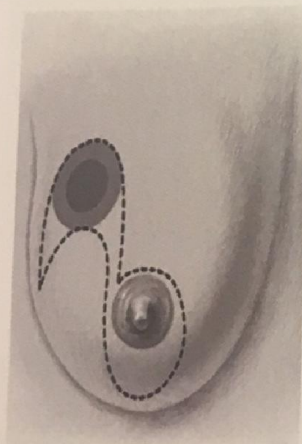


Fig. 1-21 Even a small degree of periareolar de-epithelialization creates the oncologically important dissection freedom for generous tumor resection and subsequent defect cover.

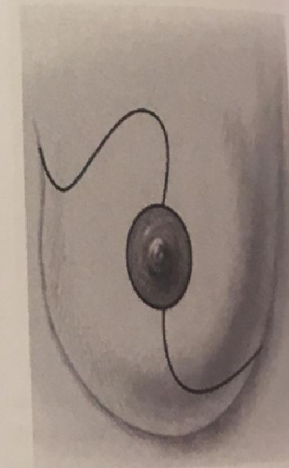
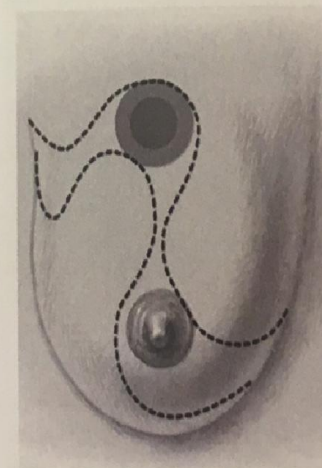


Fig. 1-22 There are hardly any limits to the surgeon's "imagination," even if the incision shown here is used very rarely.

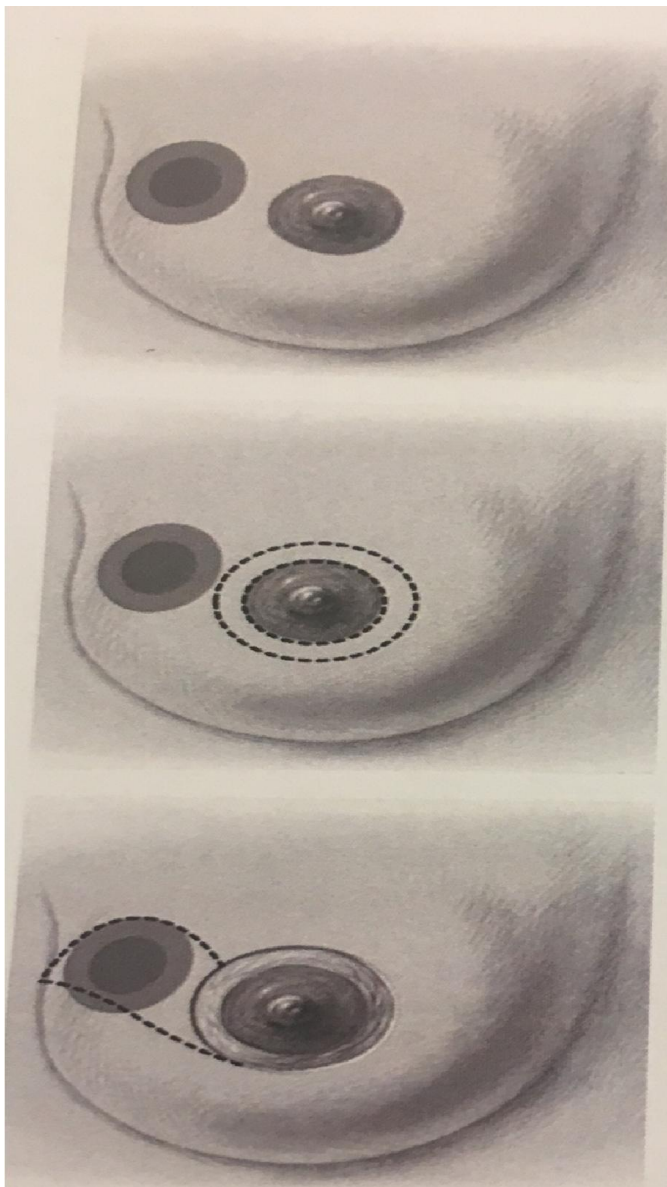


Fig. 1-16 Oncoplastic operations are an option for breast conservation, especially when the size of the tumor would leave a problematically large defect following adequate oncologic resection. Periareolar de-epithelialization and nipple repositioning play a key role

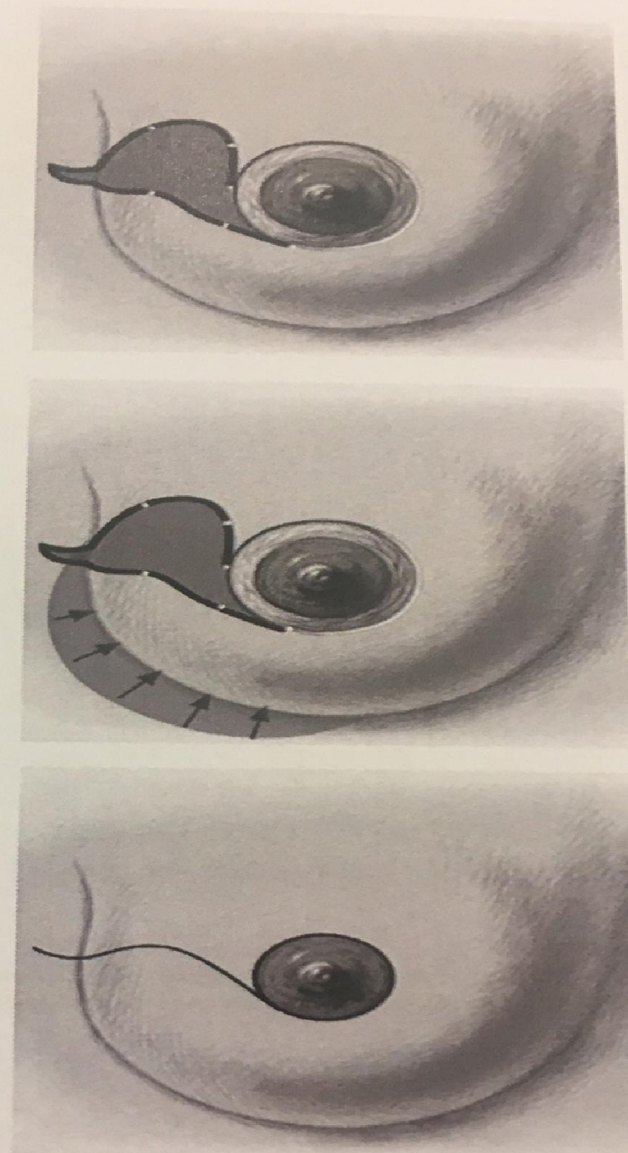


Fig. 1-17 Along with nipple repositioning, intramammary breast mobilization into the defect, which is difficult to illustrate, is important. Details of the surgical possibilities are given in Chapter 2 on breast-conserving surgical techniques.

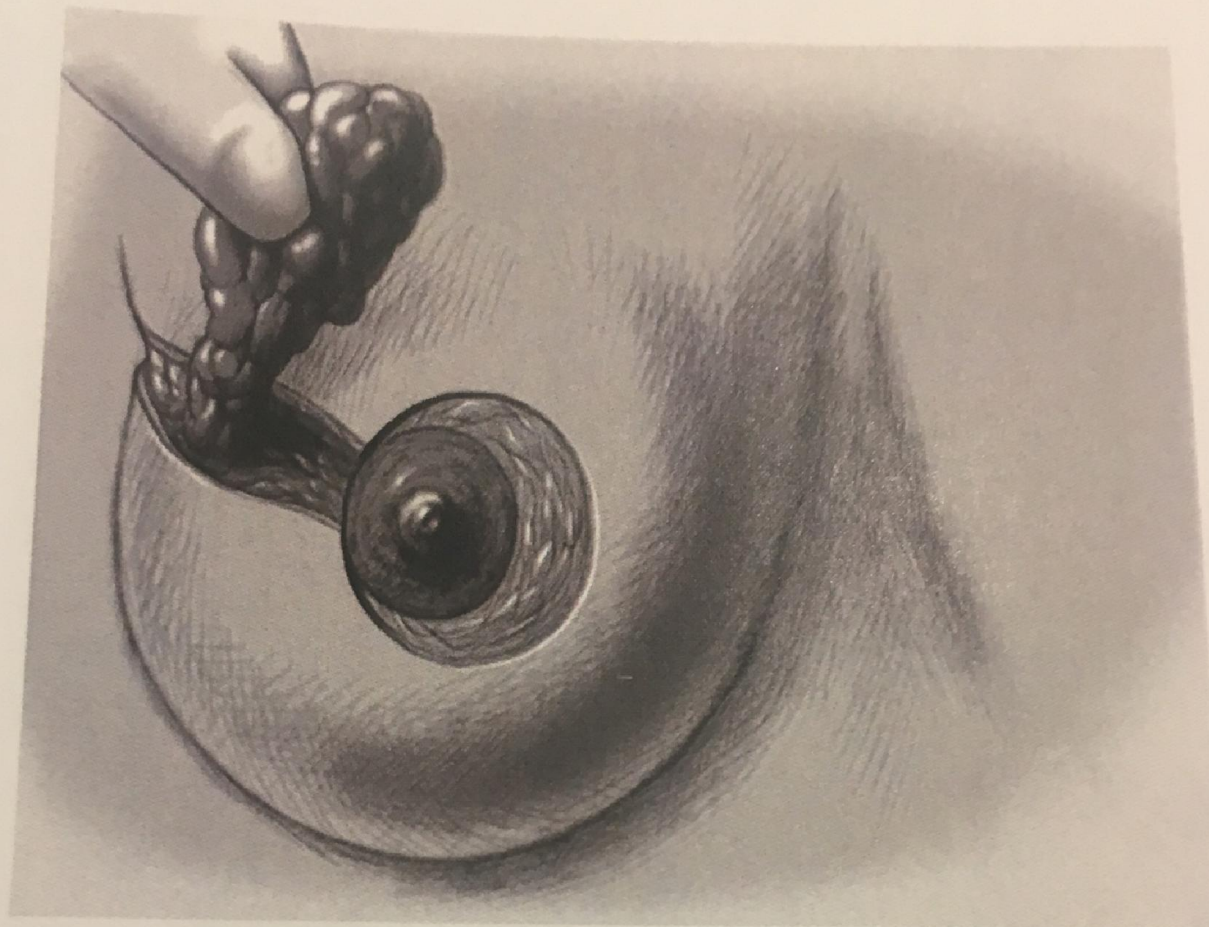
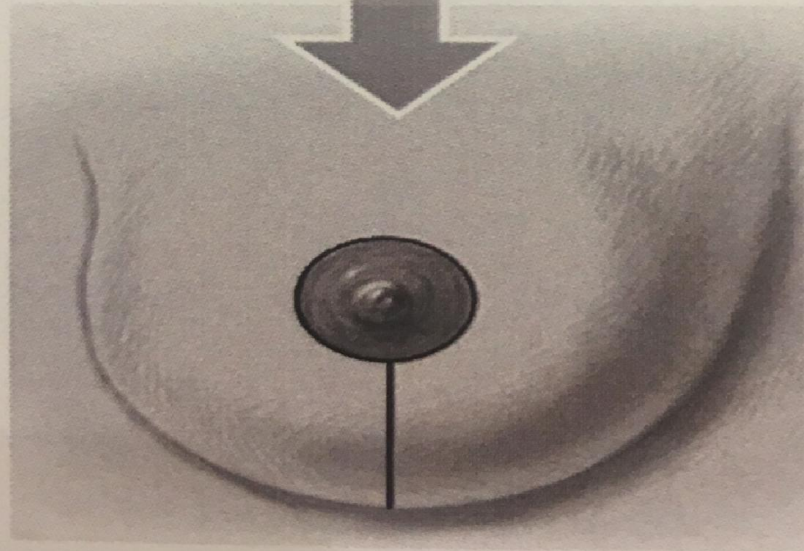
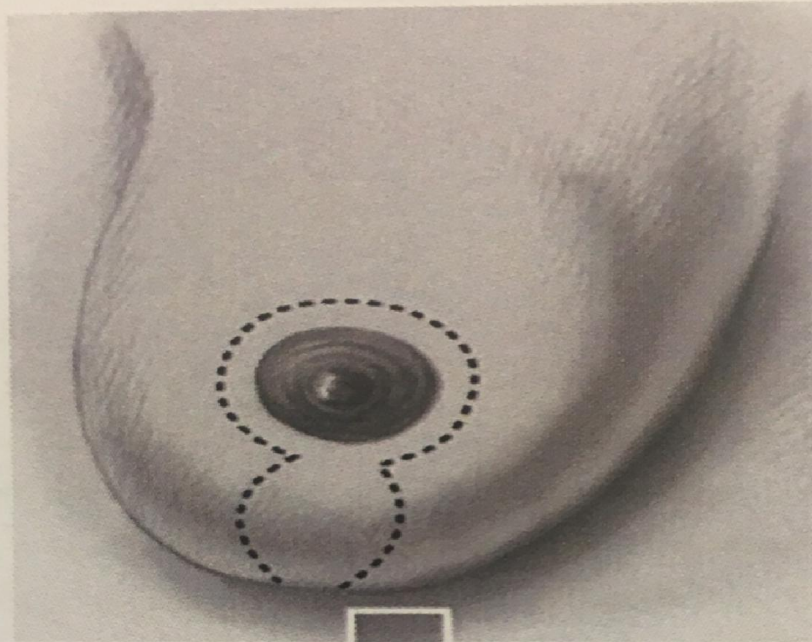
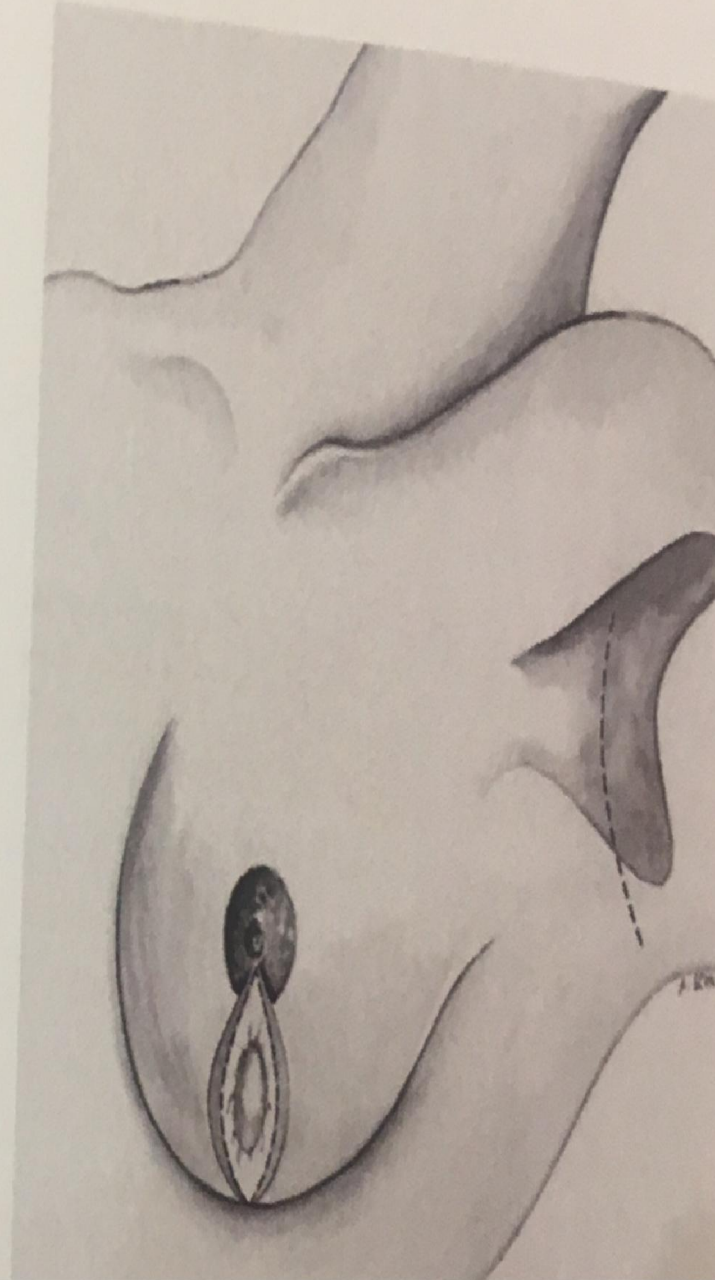
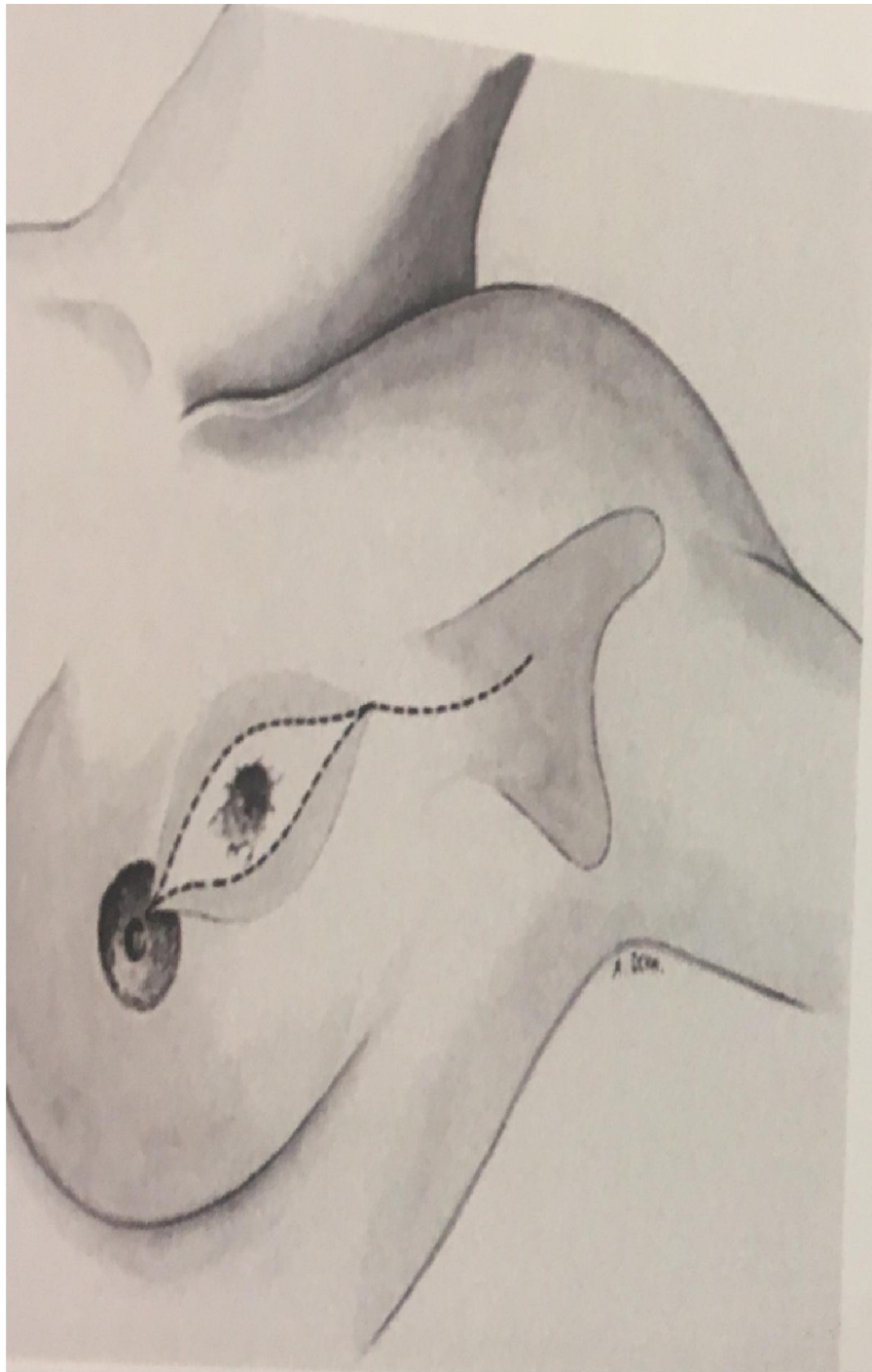


Fig. 3-41 Excision in this case follows an eccentric periareolar de-epithelialization pattern, which is completed laterally by excision of a curved ellipse of skin. The segment containing

the tumor is resected down to the pectoralis fascia. If the breast is slightly ptotic, the periareolar de-epithelialization can be used to adapt the skin to the smaller breast.





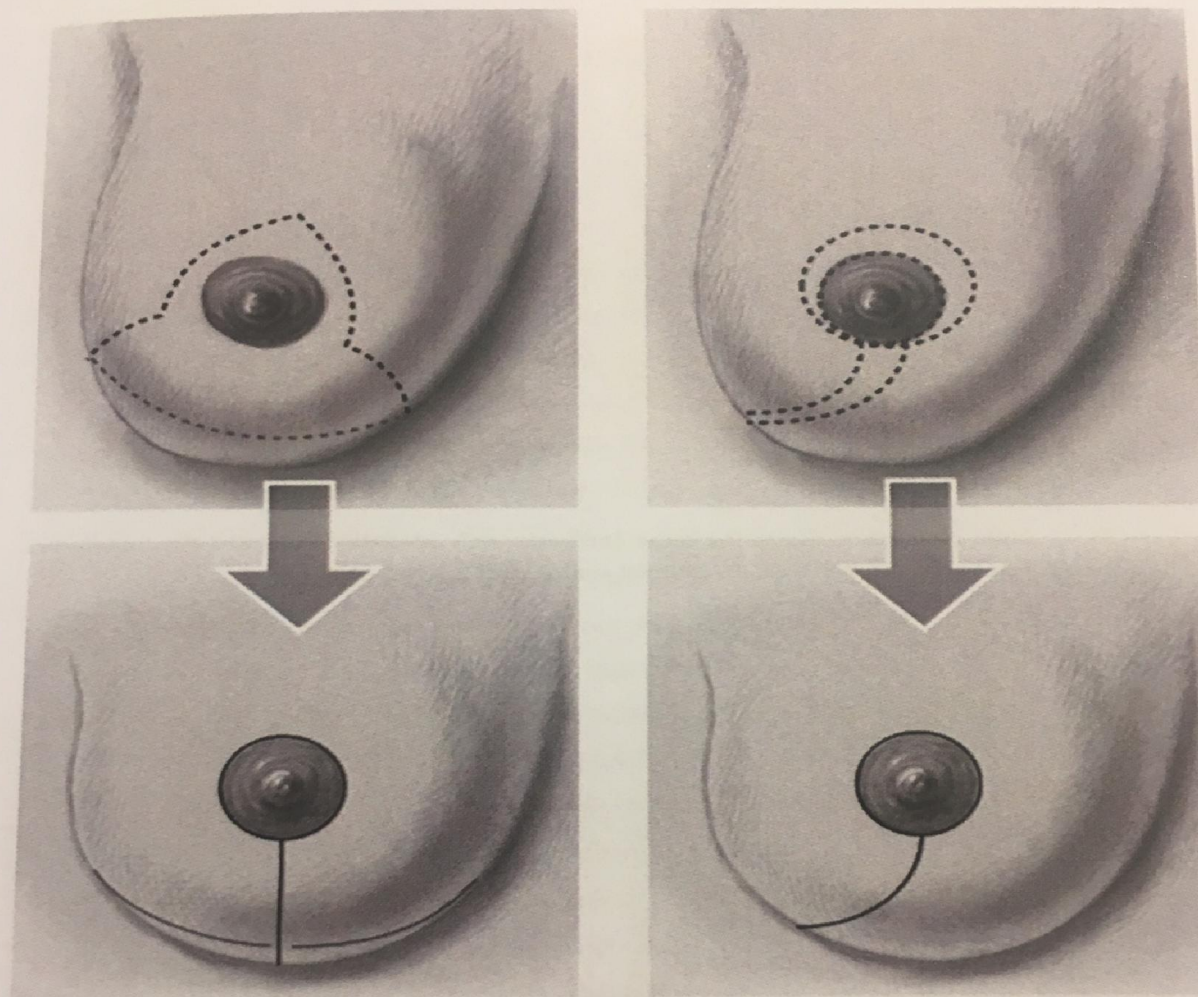
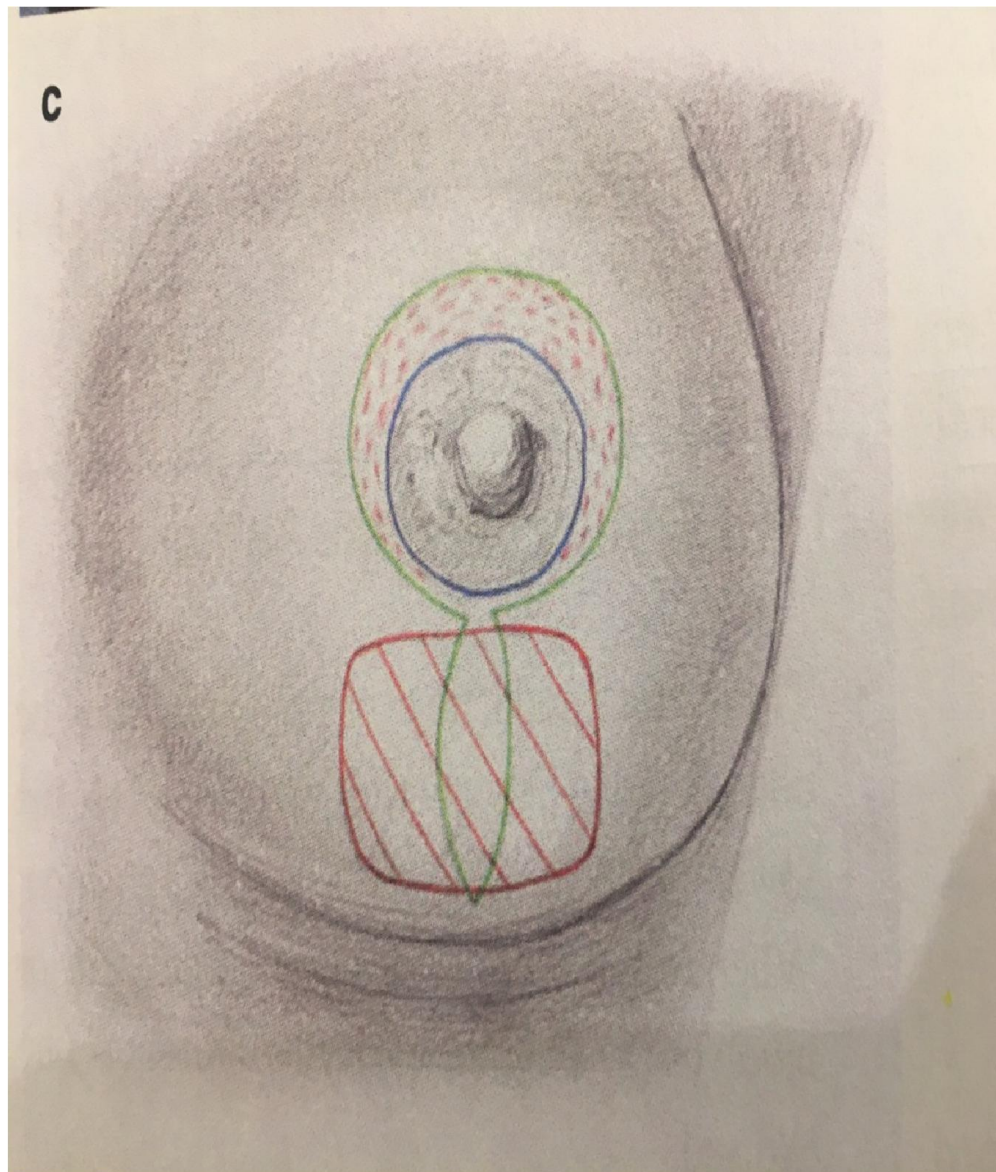


Fig. 1-15 The inverted T incision (for a central-inferior pedicle in this case) comes into the complex surgery category of tumor-adapted reduction mammoplasty or mastopexy. How-

ever, the approach for every reduction procedure can be through any of the skin incisions presented here, at least in principle, though this is not useful in reality.

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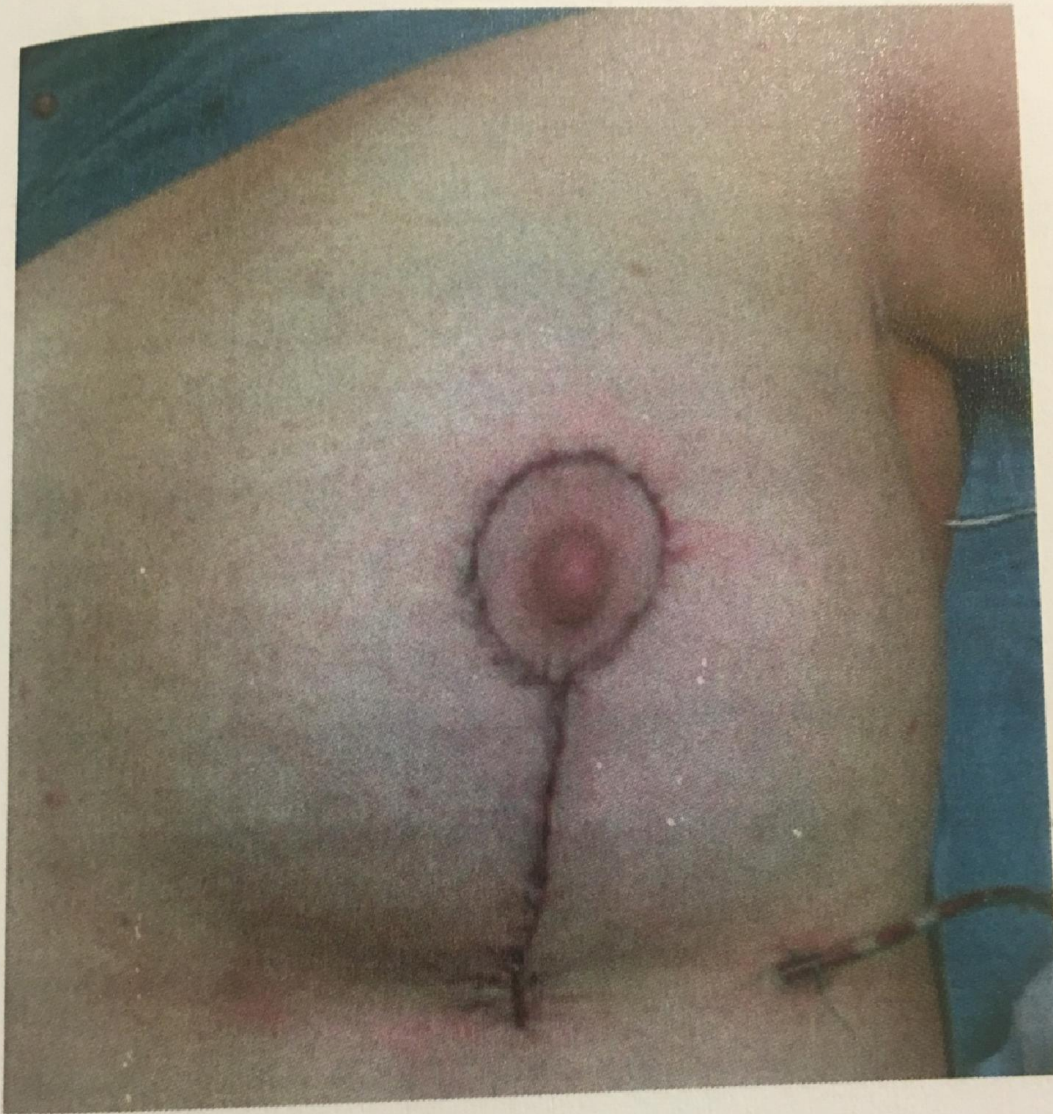


Fig. 20.6 The left breast after skin closure







