

# Vertical Scar Mastopexy with an Implant

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**Abstract.** We describe a technique for the correction of ptotic and hypoplastic breasts that combines the vertical scar technique with the insertion of a subpectoral saline implant. This operation consists of a vertical elliptical skin incision through which we make a subpectoral pocket, insert a smooth surface implant, sit the patient up, and mark a new nipple placement. We then remove a wedge of breast tissue above the areola to position it at the marked spot. This simple technique has few complications and a high level of patient satisfaction.

**Key words:** Vertical scar mastopexy—Breast implant —Ptotic breasts—Hypoplastic breasts

Postlactation breast involution, breast tissue atrophy, aging breasts, weight reduction, and idiopathic or constitutional breast deformities contribute undesirable breast ptosis that can be improved with a combination of breast augmentation and vertical mastopexy.

### **Materials and Methods**

We have operated 50 patients with this technique from May 1999 to May 2002. Their ages ranged from 28 to 60 years.

Preoperatively the patient is marked in the standing position; the perimeter of the "new" breast is outlined including the existing inframmary fold and sometimes below it when there is constriction of the lower poles. An implant size is chosen according to sensible patient wishes in accord with our recomendations (Fig. 1). A preliminary vertical ellipsis is marked from the proposed new nipple placement to just short of the proposed mammary fold. These markings will be reevaluated after the insertion of the implant with the patient sitting up on the operating table.

With the patient under general anesthesia we infiltrate the two areas to be undermined with a combination of 1 liter of Ringers lactate, 50 cc of 1%xylocaine, and 1 cc of 1/1000 adrenaline. Usually about 100–200 cc of this solution is used per side.

We start the operation with a 5-cm vertical incision (Fig. 2) on one of the sides of the marked vertical ellipsis close to the inferior apex; dissect down and beyond the insertions of the pectoralis mayor muscle and release them in the inferior and medial quadrants (Fig. 3,4). With a blunt dissection, we then complete the pocket for the implant. Then the saline smooth surface implant is inserted and inflated to the previously determined volume, a temporary drain is left in place and the split muscle is sutured. The augmentation is done on both sides.

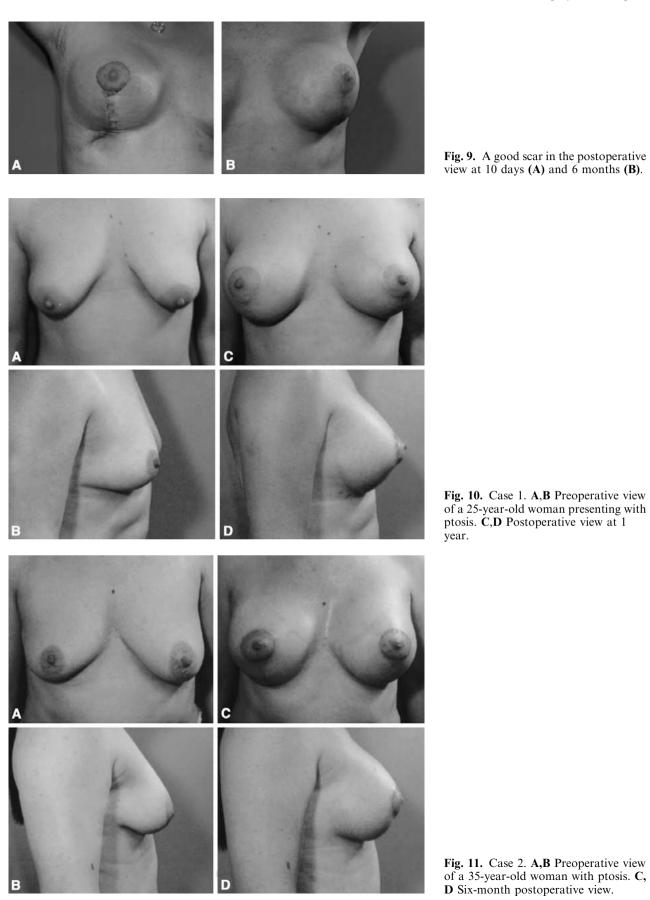
At this point the patient is sat up on the operating table and the new nipple placement is carefully and symmetrically reselected; an ellipse is marked that encompasses the areola staring from the nipple placement to just short of the fold. One side of the ellipse coincides with the previous vertical incision (Fig. 5).

We then deepitheliaze the skin above and below the areola, undermine the edges of this ellipse, and remove a transverse wedge of breast tissues above the areola rim of about the same width as the centimeters we want to elevate it. A nicer conical shape to the existing breast tissues can be achieved by placing transverse mattress stitches on the deepithelialized breast skin surface (Fig. 6,7). Finally, we close the skin in two layers, bringing out the nipple and areola through a circle previously marked in the desired position (Fig. 8).

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- Fig. 1. Preoperative view.
- Fig. 2. A vertical incision on one of the sides of the marked vertical ellipse.
- Fig. 3. A dissection to meet the pectoralis mayor.
- Fig. 4. A blunt dissection to complete the pocket for the implant.
- Fig. 5. The saline smooth implant is inserted and inflated.
- Fig. 6. Breast tissue is undermined on the subglandular plane.
- Fig. 7. Breast tissue is introduced below complex areola-nipple to permit superior elevation.
- Fig 8 Peroperative view



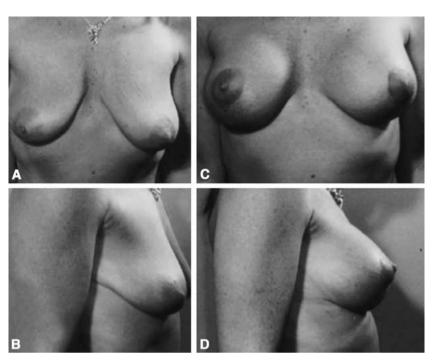
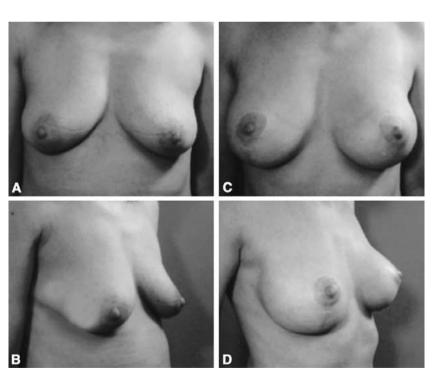


Fig. 12. Case 3. A,B Preoperative view of a 45-year-old woman with ptosis and asymmetry. C,D One-year postoperative view.



**Fig. 13.** Case 4. **A,B** Preoperative view of a 50-year-old woman with ptosis. **C,D** One-year postoperative view.

## Results

A high degree of patient satisfaction was achieved with this simple procedure, as well as a good scar (Fig. 9). Two hematomas were drained; there were no infections, no necrosis, and no wound dehiscences. There where three cases of mild loss of nipple sensation; the latter recovered. Two cases of implant displacement, one inferiorly and one superiorly, needed a secondary revision, and up to now we have not had any complaints of capsular contracture or asymmetry (Figs. 10–13).

## Discussion

In 1985, Puckett [1] and Snow [2] described periareolar techniques that are still used for minor elevations of the nipple–areola complex. Regnault [3] was the first to consider an implant to improve minor ptosis, but when the nipple still looks down, a mastopexy needs to be done. The periareolar techniques alone, in our hands, tend to flatten the breast, and the scar around the areola widens after some time. We modify the existing breast tissues in medium to large breast ptosis in order to improve the projection; this has lasting and aesthetic results.

Arie [4] and Dartigues [5] described breast reduction mastopexies performed through midvertical incisions that produce very acceptable scars. Spira et al. [6] note that patients will have a much higher acceptance of the resulting scars when they are satisfied with their postoperative breast size and shape. The vertical scar [7,8] allows for the construction of a more conical breast; when it sits on an implant it produces a lasting modification with high patient and surgeon satisfaction.

Mastopexy by itself is usually not followed by a high satisfaction rate; patients expect a better or bigger breast shape. The combination of augmentation plus mastopexy has a higher acceptance [9,10].

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