

Vertical Scar Reduction Mammoplasty

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Summary: Since 1989, the authors have performed vertical scar reduction mammoplasty on over 3000 patients. In 2006, the authors described their technique. Since then, the authors have made several modifications that they believe have improved both the reliability of the procedure and the outcomes that they are able to achieve. Key modifications are described in this article and the accompanying video. (*Plast. Reconstr. Surg.* 136: 23, 2015.)

Since 1989, we have performed vertical scar reduction mammoplasty on over 3000 patients. (See Video, Supplemental Digital Content 1, which demonstrates current technique for vertical scar reduction mammoplasty, available in the “Related Videos” section of the full-text article on PRSJournal.com or, for Ovid users, at <http://links.lww.com/PRS/B314>.) In 2006, we described our technique.¹ Since then, we have made several modifications that we believe have improved both the reliability of the procedure and the outcomes that we are able to achieve (Table 1).

PATIENT SELECTION

We exclusively perform this technique in all patients presenting for breast reduction. Although it is possible to perform this technique on patients with large breasts, it must be noted that the postoperative breast size will likely remain larger than when compared with other techniques. In patients with significant mammary hypertrophy who desire a very small postoperative breast size, this technique is unsuitable.

OPERATIVE TECHNIQUE

Pedicle Design and Selection

A superior pedicle is used if any part of the new areola lies superior to a line joining the blocking triangles. We have modified our previous description of the medial pedicle to a superomedial

pedicle if all of the new areola lies inferior to this line. This provides a more robust blood supply to the nipple-areola complex in cases of significant glandular ptosis.²⁻⁵ If the nipple-areola complex is situated too medially, a superolateral pedicle may be used to allow rotation and inseting. Our method of pedicle selection limits the length-to-base width ratio of both the superior and superomedial dermoglandular flap to 1:1 (or less), providing a reliable blood supply to the nipple-areola complex.

Choosing the New Position of the Nipple-Areola Complex

Marking the anticipated position of the new nipple-areola complex in vertical scar reduction mammoplasty differs from other reduction techniques. We previously described a phenomenon in vertical scar reduction mammoplasty whereby the nipple-areola complex is located significantly higher (approximately 1.3 cm) at both early and long-term follow-up after this procedure compared with the preoperative markings.⁶ Originally, we believed this was because of coning of the breast parenchyma and skin redistribution;

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 Video Available Online

Video. Supplemental Digital Content 1, which demonstrates current technique for vertical scar reduction mammoplasty, is available in the “Related Videos” section of the full-text article on PRSJournals.com or, for Ovid users, at <http://links.lww.com/PRS/B314>.

however, we now believe that unweighting of the breast plays an important role in this phenomenon. This is especially important when performing reduction mammoplasty on patients with asymmetric breasts (approximately 100-g difference or greater), as the nipple-areola complex on the side requiring a larger reduction will tend to be higher postoperatively (typically 1 to 2 cm) than the contralateral side if not accounted for in preoperative markings.

Excision of Breast Tissue

Excision of skin and breast tissue is defined by the skin markings, and modification of these markings intraoperatively is unnecessary. Incising around the pedicle, a 2.5-cm-thick dermoglandular flap is developed, followed by a 2.5-cm-thick lateral pillar. This 2.5-cm thickness is maintained as the lateral pillar and superior dermoglandular flap are developed. It is important to maintain a flap thickness of 2.5 cm throughout the dissection, as overresection can lead to contour irregularities and underresection can result in an inadequate reduction of breast volume (up to 100 to 300 g per breast). The medial pillar is developed by incising straight through the breast parenchyma, leaving more breast fullness

medially, which contributes to a better final breast shape. Finally, the tissue between the inferior edge of the vertical wound and the inframammary crease is thinned to prevent a dog-ear.

Liposuction

Given the utility of liposuction for both breast volume reduction and contouring of the lateral chest wall, we now use liposuction in all cases. In particular, liposuction of the lateral thoracic compartment helps to shape the lateral breast border.

Breast Shaping and Wound Closure

Wound closure is performed in two planes: parenchymal pillar sutures and the skin-gathering box sutures. We use an inverted no. 1 Vicryl suture (Ethicon, Inc., Somerville, N.J.) placed through the breast capsule to reapproximate the medial and lateral pillars. Usually, only two parenchymal pillar sutures are required. The inferiormost suture should be no closer than 4 cm from the inferior end of the incision to prevent a dog-ear at the inframammary crease.

This technique dissociates the skin at the inframammary crease from the new parenchymal crease. To reconstitute this relationship, the skin of the vertical wound must be gathered to bring the skin at the inframammary crease superiorly to lie at the level of the inferior extent of the parenchyma. A four-point gathering box stitch is performed using a 3-0 Monocryl suture (Ethicon) to gather the skin of the vertical wound. This box stitch is started at the inferior apex of the wound and continued superiorly until (1) no vertical skin redundancy remains and (2) the vertical scar lengths are approximately equal bilaterally. The ideal length of the vertical limb from the inferior aspect of the scar to the inferior border of nipple-areola complex depends on the preoperative breast size and size of reduction, but typically ranges from 6 to 11 cm. Any gaping of the horizontal pleats caused by the box stitches is corrected using an inverted deep dermal suture.

Table 1. Updates to the Vertical Scar Reduction Mammoplasty Technique

	Updated Technique	Original Technique
Pedicle	Superomedial pedicle if entire new areola inferior to blocking triangles	Medial pedicle used if entire new areola inferior to blocking triangles
Nipple-areola complex position	Position of new nipple-areola complex lowered 1–2 cm on the larger side in cases of asymmetry (≥ 100 g difference)	Placed at equal height in all reduction cases
Liposuction	Used in all cases	Used in some cases

CODING PERSPECTIVE



This information provided by Dr. Raymond Janevicius is intended to provide coding guidance.

19318–50 Bilateral breast reduction

- The breast reduction code, 19318, is used for all methods of breast reconstruction, including pedicled nipple-areolar complex procedures, as well as free nipple grafting procedures.
- The vertical scar reduction mammoplasty does not have its own separate code.
- Code 19318 is global and includes:
 - Parenchymal excision
 - Liposuction
 - Preservation of the nipple-areolar complex
 - Transposition of the nipple-areolar complex
 - Skin and parenchymal flap transpositions
 - Wound closure
- Reporting any of these global components separately is unbundling.
- Some payers prefer a two-line entry on claims:
 - 19318 Right breast reduction
 - 19318–50 Left breast reduction
- Others prefer modifiers “RT” and “LT”:
 - 19318-RT Right breast reduction
 - 19318-LT Left breast reduction
- All breast reduction procedures should be pre-authorized with the payer **in writing** prior to performing the procedures.

REPEATED BREAST REDUCTION

We have now operated on over 40 patients using our modified technique for repeated breast reduction and have not experienced any cases of nipple-areola complex necrosis or loss. Our experience over the past 15 years has shown that repeated breast reduction using our modified technique is a safe procedure even when the initial breast reduction technique is unknown.⁷ Furthermore, we have found that liposuction is an important adjunct to achieve volume reduction while limiting the amount of dissection during repeated breast reduction.

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