



## Correction of Postoperative Nipple/Areola Malposition without Nipple Grafting

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Sir:

Rietjens et al<sup>1</sup> report 16 cases of nipple grafting. Fourteen of these cases were for treatment of nipple malposition in patients undergoing nipple-sparing mastectomies or breast-conserving surgery and radiation. Two primary breast reduction patients were included, although they presumably did not have malpositioned nipples. Still, 14 cases of nipple grafting to correct nipple malposition is a high volume for 1 surgeon over 3 years. Some cautionary notes are in order lest this operation be considered a “go to” procedure for cases of nipple overelevation.

A high-riding nipple is very common, present in at least 1 breast in 41.9% of published mammoplasties<sup>2</sup> (and apparent in the contralateral breast in the authors' Figs. 3 and 4). In mastopexies and breast reductions, nipple overelevation is usually caused by (1) the inverted-T technique, a design that overelevates the nipple,<sup>2,3</sup> and (2) preoperative marking of the planned nipple position.<sup>3</sup> Preoperative marking commits the surgeon to a nipple level before the new breast mound is formed. Nipple overelevation may be avoided by (1) using the vertical technique and (2) determining nipple level after breast mound creation and locating the new nipple site at or just below the apex.<sup>3</sup> Similarly, technical considerations help reduce the risk of superior nipple migration after a nipple-sparing mastectomy.<sup>4</sup>

Unfortunately, the authors provide no clinical information for the patient depicted in their Figure 1. The authors' Figure 3 is evidently an intraoperative photograph of a different woman treated with a right nipple/areola graft. Before-and-after photographs of the same patient would have been helpful. Without at least 1 example of results, the authors'

claim that their technique is superior to other methods<sup>1</sup> is unsupported. Nipple and areola tissue loss, as documented here,<sup>1</sup> is an expected complication in the context of breast reconstruction in irradiated tissue. The authors promote fat injection but do not provide examples of its efficacy. Might simultaneous fat injection impair the already compromised vascularity of the recipient site?

In 1998, Spear and Hoffman<sup>5</sup> published the use of reciprocal skin grafts, essentially the same operation as the one used by these authors, except that the donor site is skin grafted rather than closed primarily. More recently, Spear et al<sup>6</sup> have promoted reciprocal skin flaps instead, with no cases of flap loss. These investigators evidently prefer the more reliable vascularity of a local flap. Both skin grafts and flaps leave scarring in the upper pole.<sup>5,6</sup> However, skin flaps are thicker, more reliable, and bring vascularized fat with them.

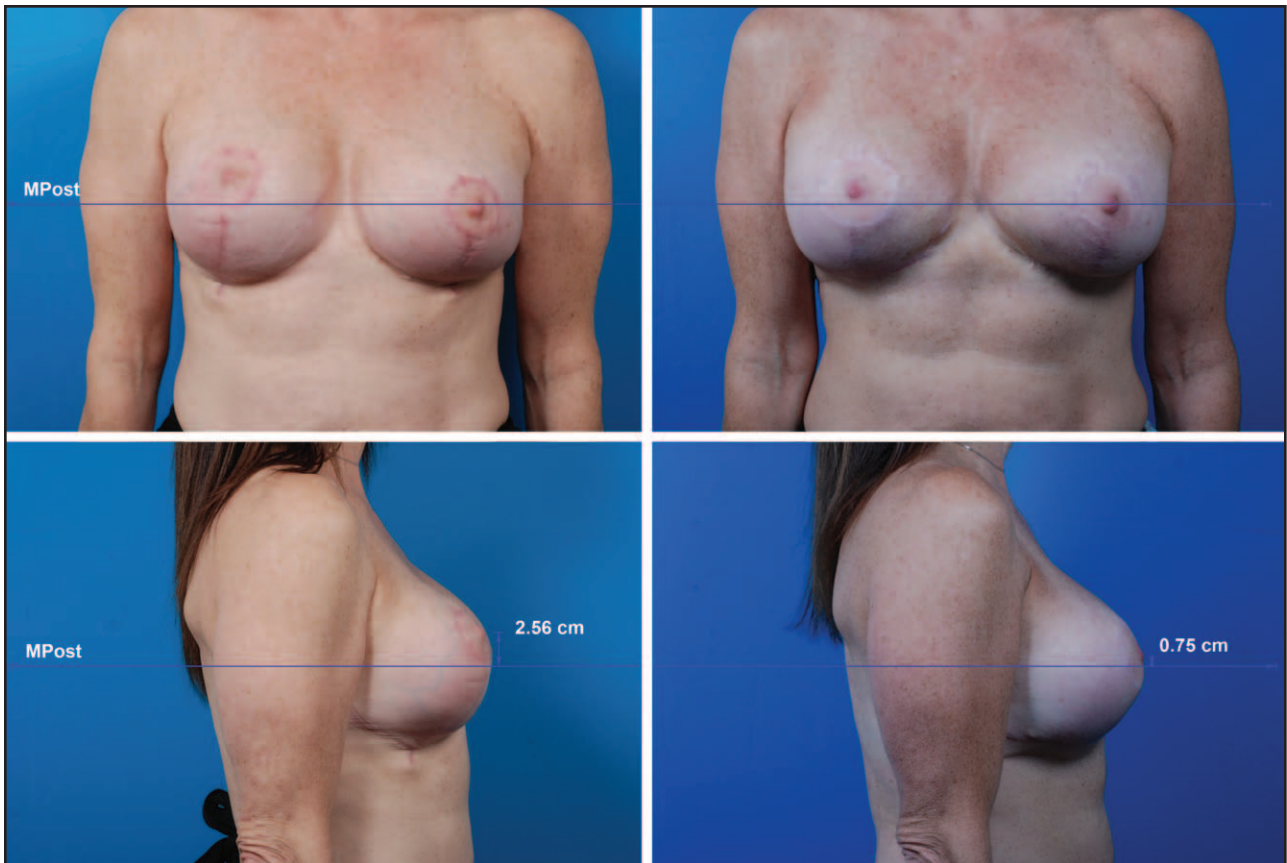
Millard et al<sup>7</sup> described skin excisions within the inframammary crease to pull the nipple down in mammoplasty patients with superiorly displaced nipples. Breast implants can assist by providing a fulcrum. The procedure may be repeated, keeping the scar tucked within the inframammary crease where there is often an existing scar (Fig. 1). The advantage of this procedure over reciprocal flaps or Z-plasties<sup>8</sup> is avoidance of a scar above the nipple, which can be visible in a low-cut top or bikini. Inframammary skin resection is safe from a vascular and sensory standpoint because there is no periareolar dissection.

The authors recommend not overly thinning the nipple graft to preserve erectility.<sup>1</sup> It is unlikely that a grafted nipple will remain erectile.<sup>9</sup> It has been known for decades that normal and erotic sensation are lost if a nipple is grafted.<sup>10</sup> The devascularized tissue must now survive as a skin graft, with variable degrees of tissue loss (including smooth muscle that provides erectility), depigmentation,<sup>1,5</sup> and scarring. Consequently, nipple/areola grafting is highly debilitating to the function and sensation of this unique and irreplaceable body part. Mammoplasty patients value their nipple sensation<sup>11</sup> and 80% of women report that nipple stimulation is important sexually.<sup>12</sup> Regardless of sexual activity, sensate body parts are always to be preferred.

Even now, almost a century after Thorek<sup>13</sup> conceived the procedure, nipple grafting is still used by some plastic surgeons for very large breast reductions.<sup>14</sup> However, with greater popularity of the

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**Fig. 1.** A 51-year-old woman presented with an overelevated right nipple/areola after a secondary vertical mastopexy and implant replacement. She was unhappy with the conspicuous nipple asymmetry and she also requested greater breast volume and cleavage. She underwent another operation to replace her implants with a larger size, combined with a superior capsulotomy and inferior capsulorrhaphy, and a horizontal inframammary skin resection to pull the right nipple/areola complex down and into better alignment with the breast mound. She is seen before this secondary surgery (A) and 8 months after surgery (B). The right nipple/areola remains slightly higher than the left, but the patient is satisfied and can now wear her bikini and low-cut tops without feeling self-conscious. Photographs are matched for size and orientation. MPost indicates maximum postoperative breast projection.

vertical mammoplasty and recognition of the safety advantages of nipple repositioning<sup>3</sup> on short pedicles rather than transposition on long ones, it is more difficult to recommend nipple grafting over nipple repositioning. Experienced operators who use the vertical mammoplasty technique exclusively report extremely few or no cases of nipple/areola loss.<sup>15</sup>

It is not difficult to raise a nipple that is too low, but it is much more challenging to lower one that is too high. A mild degree of ptosis is not necessarily unattractive and of course very natural in appearance. By contrast, an overelevated nipple, with a skyward inclination, looks unnatural. When relocating a nipple, the destructive effects of nipple grafting must be weighed carefully against possible benefits. The causes of nipple malposition, methods to prevent it, and surgical remedies that preserve nipple form and function are important considerations.

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**DISCLOSURE**

*The author has no financial interest to declare in relation to the content of this article. The Article Processing Charge was paid for by the author.*

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