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W. Grant Stevens, David R Fellows, Steven D Vath and David A Stoker
*Aesthetic Surgery Journal* 2004 24: 211
DOI: 10.1016/j.asj.2004.03.003

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An Integrated Approach to the Repair of Inverted Nipples

W. Grant Stevens, MD; David R. Fellows, MD; Steven D. Vath, MD; and David A. Stoker, MD
The authors are in private practice in Marina del Rey, CA.

Background: Many methods for the correction of the inverted nipple have been described, but no consensus has been reached as to which is the best approach.
Objective: We describe an integrated approach to the correction of nipple inversion that minimizes ductal disruption.
Methods: We performed initial nipple eversion using gentle traction with a skin hook. The nipple base was approached with the use of an inferior periareolar incision through the subcutaneous tissue. Blunt dissection parallel to the ducts restored varying degrees of projection. Selective ductal division was performed as necessary to obtain complete eversion with normal projection. To maintain the nipple in an overcorrected position, we placed a nylon traction suture through the center of the nipple and affixed to a stent consisting of a medicine cup and gauze padding.
Results: In a series of 21 patients, nipple eversion was maintained after at least 1 year’s follow-up.
Conclusions: The technique for correction of nipple inversion reported here is focused on blunt dissection through vertical spreading parallel to the lactiferous ducts, with selective division of only those ducts that restrict nipple projection. The use of traction stenting helps ensure eversion and protects the repair. The technique produces excellent results without recurrence of nipple inversion. (Aesthetic Surg J 2004;24:211-215)
A nylon traction suture was placed through the center of the nipple and affixed to a stent consisting of a medicine cup and gauze padding (Figure 1, G; Figure 7). This traction exerted an anteriorly directed force that maintained the nipple in an overcorrected position. Traction was maintained for 2 to 5 days. In follow-up evaluations we assessed maintenance of nipple eversion and subjective patient satisfaction.

**Results**

To date, after at least 1 year’s follow-up in each case, we have found no recurrence of nipple inversion among the 21 patients. Nipple eversion has been consistently maintained (Figure 8), and patient satisfaction has been high. To date, no patients in our series have been known to attempt breastfeeding after the procedure. We will check patients at regular yearly intervals for 5 years after surgery.

**Discussion**

The nipple is of great importance as a visual, nutritive, and sexual focus of the female body. For some women,
issues of hygiene are important as well. Because breast-
feeding, body image, and sexuality may be adversely
affected by nipple inversion, women with this condition
often choose to undergo surgical correction.
In the surgical approach described in this article, the
structural principles of nipple inversion are applied to
treat the disorder effectively. Instead of dividing all lactif-
erous ducts, it is possible to selectively divide only those
that restrict nipple projection. This technique entails ver-
tical spreading parallel to the ducts, centrally and periph-
erally, followed by strategic ductal division. This
duct-sparing approach may allow some women to breast-

Figure 3. The nipple base was approached by way of an inferior peri-
areolar incision made through the subcutaneous tissue to meet the lactif-
erous ducts.

Figure 4. Ductal structures were easily visualized and preserved during
the dissection.

Figure 5. A, B, Internal 4-0 chromic sutures were placed, one from the
12 o’clock to the 6 o’clock positions, and one from the 3 o’clock to the
9 o’clock positions to draw together the opposite walls of the nipple.

Figure 6. An external 4-0 nylon chromic purse-string suture was made
at the junction of the nipple-areola border.
Figure 7. A, B, To maintain the nipple in an overcorrected position, we placed a 4-0 nylon traction suture through the center of the nipple and affixed it to a stent consisting of a medicine cup and gauze padding.

Figure 8. A, C, Preoperative views of a 26-year-old patient. B, D, Postoperative views 1 year after correction of nipple inversion.
feed after surgery. The elimination of dead space and increase in tissue bulk beneath the nipple contribute to lasting postoperative nipple projection. The placement of a purse-string suture at the nipple-areola border, as well as postoperative overcorrection with traction stenting, is critical during the healing phase in helping the nipple resist initial recurrent forces. This stent not only helps ensure eversion but also protects the repair while the projected position is maintained. This technique has yielded excellent results without recurrence of inversion and should be considered by the surgeon of any patient contemplating surgical correction of this disfiguring disorder.

**Conclusion**

Repair of inverted nipple deformities can be reliably performed with the use of an integrated surgical approach that minimizes ductal disruption and provides postoperative traction stenting. Eversion achieved with the use of this technique is maintained without recurrence of inversion.

**References**


Accepted for publication November 20, 2003.

Reprint requests: W. Grant Stevens, MD, 4644 Lincoln Boulevard, Suite 552, Marina del Rey, CA 90292.

1090-820X/$30.00

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doi:10.1016/j.asj.2004.03.003

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