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Plastic & Reconstructive Surgery:
July 2006 - Volume 118 - Issue 1 - pp 274-275
doi: 10.1097/01.prs.0000222235.19796.f4
Editorials/Reviews/Letters and Viewpoints: Letters

Complication Rates in Inferior Pedicle Reduction Mammoplasty

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Sir:

We read with great interest the article entitled A Comparison of Complication Rates in Large and Small Inferior Pedicle Reduction Mammoplasty by O'Grady et al. (*Plast. Reconstr. Surg.* 115: 736, 2005). We commend the authors for dealing with this matter, and also for producing a very valuable report. We would like to present our own experience on the matter, focusing on some of the complications mentioned in the article and their etiologic factors. It is very interesting that the only complication with a statistically significant difference between small and large reductions was wound healing in general (encompassing wound infection, wound dehiscence, and delayed healing, which in our view are all interrelated).

The issue of nipple/areola necrosis (0.4 percent overall incidence in the article) depends more on the length and base width of the pedicle than on any other variable. Although the inframammary fold-to-nipple distance was one of the variables collected in this study, the authors did not comment on the relationship between this distance and nipple survival. Our own experience is that this is the most significant factor in predicting and avoiding this complication and that, irrespective of the predicted resection weight, pedicle length (as predicted by inframammary fold-to-nipple distance) should be measured in all patients and taken into account in the process of technique selection and pedicle design.

Wound dehiscence, especially at the T junction, depends on various factors, the most important being wound infection and tension of the wound edges. The authors' overall dehiscence rate was 8.6 percent (6.9 percent for small reductions and 16 percent for larger reductions). Our own wound dehiscence rate was 4.6 percent in a series of 371 patients,¹ with a mean resection weight of 790 g per breast. We believe that the difference lies in the appreciation of the role of tension at the T junction. We believe that leaving a small triangle of skin at the inframammary fold helps reduce the tension

and thus minimizes the incidence of this complication.

Wound infection was found to be significantly different between the two groups, but we would like to draw attention to a variable that we believe plays a critical role in infection: duration of surgery. Large breasts consist mainly of fatty tissue, and prolonged operative times (often associated with large reductions) result in drying out of fat at the wound edges with resultant higher infection rates. We believe that keeping the flaps and the pedicle moist (i.e., with saline-soaked packs) deals with this problem quite efficiently.

The overall incidence of hematoma in this article was 4.1 percent (3.7 percent in small reductions and 6 percent in large reductions), 10-fold the incidence found in our own series (0.3 percent).¹ Although use of preoperative infiltration with an epinephrine-containing solution is not commented on in this article, we believe that it is most effective in minimizing bleeding and hematoma formation, and we certainly attribute our own low incidence to it.²

Fat necrosis is a result of dubious blood supply to areas of fat, and in our view, it results from a combination of infection and bad surgical technique, with smoking obviously playing a role as well. Our own fat necrosis incidence is similar to the incidence observed in the article (0.8 percent versus 1.5 percent).^{1,3} The way to minimize the problem is careful patient selection and careful surgical technique, avoiding leaving areas of loose fat during flap and pedicle dissection.

Loss of nipple sensation (5.6 percent overall incidence in the article) depends largely on technique. The nerve supply to the nipple is derived from perforating branches of the third through fifth intercostal nerves, which penetrate the pectoralis major muscle and course along the muscle surface before entering the gland.^{4,5} The nerves tend to stay close to the layer of the deep fascia on the anterior surface of the pectoralis major muscle, passing at first through the deepest part of the subcutaneous tissue and then into the base of the breast. They only incline superficially toward the nipple as they approach their destination. In light of these findings, we leave 0.5 to 1 cm of fat and breast tissue on the pectoralis major, starting from the base of the pedicle and extending upward along the whole length of the muscle and laterally until we reach the lateral flaps. We believe this is the main reason for the low incidence of loss of nipple sensation in our own series.^{1,6}

Again, we congratulate the authors on their excellent publication, and we hope that our own experience can be of some use to the reader.

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REFERENCES

1. Mandrekas, A. D., Zambacos, G. J., Anastasopoulos, A., and Hapsas, D. A. Reduction mammoplasty with the inferior pedicle technique: Early and late complications in 371 patients. *Br. J. Plast. Surg.* 49: 442, 1996.
[Cited Here...](#) | [PubMed](#) | [CrossRef](#)
2. Mandrekas, A. D., and Zambacos, G. J. Preoperative infiltration with lidocaine and epinephrine for breast reduction. *Plast. Reconstr. Surg.* 103: 2087, 1999.
[Cited Here...](#) | [View Full Text](#) | [PubMed](#) | [CrossRef](#)
3. Mandrekas, A. D., Assimakopoulos, G. I., Mastorakos, D. P., and Pantzalis, K. Fat necrosis following breast reduction. *Br. J. Plast. Surg.* 47: 560, 1994.
[Cited Here...](#) | [PubMed](#) | [CrossRef](#)
4. Craig, R. D. P., and Sykes, P. A. Nipple sensitivity following reduction mammoplasty. *Br. J. Plast. Surg.* 23: 165, 1970.
[Cited Here...](#) | [PubMed](#) | [CrossRef](#)
5. Climo, M. S., and Alexander, J. E. Intercostothelial circulation: Nipple survival in reduction mammoplasty in the absence of a dermal pedicle. *Ann. Plast. Surg.* 4: 128, 1980.
[Cited Here...](#) | [View Full Text](#) | [PubMed](#) | [CrossRef](#)
6. Zambacos, G. J., and Mandrekas, A. D. Breast-feeding after inferior pedicle reduction mammoplasty. *Plast. Reconstr. Surg.* 107: 294, 2001.
[Cited Here...](#) | [View Full Text](#) | [PubMed](#) | [CrossRef](#)