Nipple-Sparing Mastectomy and Breast Reconstruction: Does Incision Matter?

Francisco Pimentel Cavalcante

Department of Breast Surgery, Hospital Geral de Fortaleza (HGF), Fortaleza, Brazil

Dear Editor

We read the recently published article by Lanthaler et al. [1] entitled “Influence of Incision Site on Postoperative Outcome in Skin-/Nipple-Sparing Mastectomy: Is There a Difference between Radial and Inframammary Incision?” It is a study about the influence of the type of incision on the aesthetic outcomes after immediate breast reconstruction in women undergoing mastectomy. The authors showed better results in patients who used an inframammary fold incision (IMF), regardless of the type of implant-based reconstruction (“direct-to-implant” or “two-stage reconstruction”). We would like to congratulate the authors for their excellent work and add some comments.

We agree with the results obtained in their study. The IMF incision for nipple-sparing mastectomy (NSM) possibly allows better vascular preservation of the skin flaps, produces the least visible scarring and does not affect breast shape. In selected cases, we can even use pre-pectoral implant reconstruction. However, it has greater technical difficulty, especially in larger breasts. Therefore, not all patients are candidates for NSM using the “IMF approach.” The radial approach provides, as the authors pointed out, a suitable shape, but in our view, radial incisions produce a scar that can bring an inappropriate aesthetic result, being more visible. Additionally, radial incision can lead to NAC malposition. We believe that the periareolar incision (PA), with or without a small lateral extension, could be a viable option.

Historically, based on small retrospective studies, PA incision has been associated with a higher rate of nipple-areola complex (NAC) necrosis following NSM and immediate breast reconstruction, because of disruption of the NAC blood supply [2, 3]. On the other hand, the PA incision has been used in larger breasts: this may perhaps contribute to NAC necrosis rate. A few years ago, we evaluated a sample of 31 NSM with PA and two-stage reconstruction [3]: in fact, as mentioned in the study, it is our preferred method for implant-based breast reconstruction, but we think that direct-to-implant (DTI) breast reconstruction is a reasonable option as well. NAC necrosis was observed in three cases (9.6%), of whom one required debridement. Cosmesis was classified as excellent by 96.8% of the patients ($n = 27$) on the Harvard scale. The differences between our results and those previously published were possibly due to the population studied and the management of the implant reconstruction. First, the patients of our study were operated by the same surgical team, reducing the possibility of bias among surgeons. Second, we did not select DTI breast reconstruction in this sample. Third, our reconstruction protocol included the introduction of a temporary tissue expander with an integrated valve and only 100 mL of filling, regardless of the breast volume, in order to minimize the compressive effect on the flaps. We hypothesized that this may have minimized our complication rates. Finally, patient selection was crucial: the average weight of the mastectomy specimens and body

mass index were 311 g and 25.07 (range: 21.1–30.5), respectively.

We are currently updating our sample and looking at our results for IMF incision and NSM. In addition, we will evaluate patients undergoing DTI breast reconstruction. We need more studies to better understand what the best management of NSM is, as well as its oncological safety, since there are no randomized controlled studies in this scenario.

Conflict of Interest Statement

The author has no conflicts of interest to declare.

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References

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