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LETTER TO THE EDITOR

Reply to Comment on "Recommendations for an Effective and Safe Extreme Oncoplastic Breast Surgery Combining Multiple Techniques"

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I would like to thank Prof. Franceschini for his thoughtful comments on our recent submission,[1] which provided some insights into the operative complexity frequently required in cases of extreme oncoplastic breast conservation (eOBCS).[1,2] I am in agreement that eOBCS is in its infancy, and the oncological safety of this approach must be better established. Our submission really focused on the technical details on how to perform this surgery and not on its oncological safety.

I would argue that comparing eOBCS with standard breast-conserving surgery in a rigorous clinical trial is not the correct strategy. eOBCS is an inexact and nebulous term regarding both the technical details required to perform this surgery (which our submission was supposed to help clarify) and the extent of disease being treated. I recently excised 10 cm of atypia bordering on ductal carcinoma in situ (DCIS) in a staged fashion in a B cup breast with grade 2 ptosis, immediately filling her cavity with water. After confirming just 10 cm of atypia with only 0.5 cm of DCIS on final pathology, 1 week later I performed a second-stage Wise-pattern mastopexy with volume replacement, using a thoracodorsal artery perforator flap and contralateral mastopexy. Is this not eOBCS? Does the oncological safety of this surgery require validation? Clinical trials establishing the oncological safety of these procedures must explicitly address the oncological burden allowed for in the study (regardless of whether oncoplastic techniques are being used or not) and must not use inexact terms such as eOBCS, which neither clarifies the oncological burden nor the reconstructive techniques used.

Boughey et al[3] recently reported on ACOSOG Z1102, which was a phase-2, single-arm prospective trial demonstrating the safety of breast conservation and adjuvant radiotherapy for multicentric breast cancers with two or three foci of disease with or without axillary metastases. Five-year local recurrence rates were acceptably low, especially in patients who underwent preoperative breast magnetic resonance imaging. Recurrence rates were independent of age, estrogen receptor or human epidermal growth factor receptor status, T stage, and nodal involvement. Although this study requires longer follow-up, it is a step in the right direction with regard to addressing the oncological safety of breast conservation for more extensive breast cancers.

We are in agreement that comprehensive preoperative imaging is required, which was confirmed in Boughey's study demonstrating 5-year local recurrence rates of 1.7% compared with 22.6% in patients with and without preoperative magnetic resonance imaging, respectively. This facilitates meticulous localization of all areas of visible disease, as you have mentioned. We also agree that surgical oncologists here must not operate in a vacuum, and vigorous discussion (and even debate) should be anticipated at multidisciplinary conference, where radiologists, medical oncologists, radiation oncologist, surgical oncologists, and plastic surgeons contribute their opinions and expertise to the care of these challenging patients.

We also agree with the use of intraoperative ultrasound to facilitate clear margins, as has been documented in the literature[4] and encouraged by the American Society of Breast Surgeons. All breast-conserving procedures require intraoperative radiological confirmation of successful removal of the cancerous lesions, but even more importantly, in my opinion, is gross intraoperative assessment of all margins, which often correlates with final microscopic margin status.[5] Although systematic circumferential shaving has been advocated by some,[6] we only shave based on gross intraoperative assessment results but do appreciate how this could be helpful in more difficult cases (ie, DCIS and invasive lobular carcinoma). We have not routinely assessed the preserved glandular tissue with intraoperative ultrasound after resection but acknowledge that this may be a useful modality in reducing the risk of leaving behind residual disease. We believe that the placement of clips should be performed in all cases of breast conservation, not only to guide adjuvant radiotherapy, but also to help the surgeon re-excise a compromised margin, especially in the case of eOBCS where there may have been significant mobilization and rearrangement of tissues. We are aware of the use of oxidized regenerated cellulose to replace volume after breast conservation but believe this to be of more limited value in eOBCS where local chest wall perforator flaps and flaps based off the thoracodorsal artery can supply far greater volumes to repair extensive defects. We believe that one of the most useful technical strategies to successfully perform eOBCS is to combine volume displacement and autologous volume replacement techniques in one surgery[7] (treated by

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Plast Reconstr Surg Glob Open 2023; 11:e5350; doi: 10.1097/GOX.0000000000005350; Published online 26 October 2023.

Disclosure statements are at the end of this article, following the correspondence information.

many as mutually exclusive). Although we will combine a local chest wall perforator flap and a Wise-pattern mastopexy immediately in one surgery, we typically perform a delayed immediate reconstruction when a flap based off the thoracodorsal artery is required for larger amounts of volume replacement. This allows us to confirm clear margins and not exhaust a major reconstructive modality if the patient has more extensive disease requiring a mastectomy. Finally, we encourage surgeons to obtain training in both surgical oncology and reconstructive breast surgery because we believe an understanding of both fields is critical to developing the advances that will continue to push forward the field of eOBCS.

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DISCLOSURE

The author has no financial interest to declare in relation to the content of this article.

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