### **LETTERS**

# Oncoplastic to Onco-Aesthetic Surgery: A Movement toward Overtreatment?

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#### Dear Editor:

I read with considerable concern the communication from Dr Carmichael and Dr Mokbel in this journal on the subject 'Evolving Trends in Breast Surgery: Oncoplastic to Onco-Aesthetic Surgery' [1]. The authors laud the use of oncoplastic breast surgery (OBS) and characterise its further development as deserving of the designation 'onco-aesthetics'. This suggests a sense of justification for giving a pre-eminent role to aesthetic procedures in the surgical treatment of breast cancer. Such a prioritisation calls for serious reconsideration in light of treatment objectives, as current evidence indicates that the use of OBS may have a negative impact on patient outcomes in terms of survival and morbidity.

Current data demonstrate that breast conservation treatment (BCT) is associated with higher breast cancer-specific survival and improved local control compared with mastectomy [2,3]. This fact legitimises the goal of expanding the eligibility for BCT and extending its utility. The quality of cosmetic outcomes is also a factor to be considered, and there is little objection to using reasonable methods to achieve acceptable breast forms. However, the incremental and progressive use of OBS for the express purpose of achieving aesthetic excellence is controversial. There are data to suggest that patients who have undergone OBS score significantly worse than those who have undergone standard BCT in terms of cosmetic outcomes, when assessed objectively by the software programme BCCT.core [4]. This indicates that significant mobilisation during mammoplasty has implications for both cosmesis and effective boost delivery during ra-

diotherapy. Since conventional surgery was also found to offer superior outcomes with respect to quality of life and function, it has been concluded that, on the whole, the use of OBS might be disadvantageous [4]. Apart from a failure to demonstrate unequivocal improvement in cosmetic outcomes, OBS techniques are also more complex and may result in higher rates of complications; moreover, they have not been shown to provide significant improvement in local control [5]. The data indicate that larger margins with OBS may not translate to improved local control, but may create the need for additional procedures like mammoplasty, contralateral symmetrisation, and volume replacement with flaps [5]. A reductionist approach to BCT, antithetic to the philosophy that informs OBS, involves neoadjuvant systemic treatment where appropriate and demands accuracy in dissection for lower tissue resection volumes, which could decrease the need for excessively wide excisions and contralateral symmetrisations without compromising cosmesis and local control.

The adaptation of plastic surgery techniques to BCT has undoubtedly led to improvements in cosmetic outcomes. This has provided the impetus for ongoing development, resulting in an exponential increase in the range of OBS techniques. However, the routine and incremental use of OBS techniques is expansive and involves invasive procedures to a greater degree. This may be contrary to the basic tenets of medical therapy, which is founded on the principle of nonmaleficence. Perhaps it is time to re-examine our objectives for the surgical treatment of breast cancer, and whether the current trend of oncoplastic to onco-aesthetic surgery stands up to the scrutiny of primum non nocere. In over-emphasising aesthetics in breast surgical oncology, we may be subjecting our patients to the disservice of overtreatment.

#### References

- Carmichael AR, Mokbel K. Evolving trends in breast surgery: oncoplastic to onco-aesthetic surgery. Arch Plast Surg 2016;43:222-3.
- Hartmann-Johnsen OJ, Karesen R, Schlichting E, et al. Survival is better after breast conserving therapy than mastectomy for early stage breast cancer: a registry-based follow-up study of norwegian women primary operated between 1998 and 2008. Ann Surg Oncol 2015;22:3836-45.
- van der Heiden-van der Loo M, Siesling S, Wouters MW, et al. The value of ipsilateral breast tumor recurrence as a quality indicator: hospital variation in the Netherlands. Ann Surg Oncol 2015;22 Suppl 3:S522-8.
- Lansu JT, Essers M, Voogd AC, et al. The influence of simultaneous integrated boost, hypofractionation and oncoplastic surgery on cosmetic outcome and PROMs after breast conserving therapy. Eur J Surg Oncol 2015;41:1411-6.

5. De Lorenzi F, Hubner G, Rotmensz N, et al. Oncological results of oncoplastic breast-conserving surgery: long term follow-up of a large series at a single institution: A matched-cohort analysis. Eur J Surg Oncol 2016;42:71-7.

## Response to Letter: Evolving Trends in **Breast Surgery: Oncoplastic to Onco-Aesthetic Surgery**

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We thank the editors for giving us an opportunity to respond to this letter. We also thank the authors of the letter for their interest in our article and their kind comments. The authors seem to imply that oncoplastic breast surgery (OBS) is restricted to breast-conserving surgery for large tumours. However, OBS also refers to the techniques of skin-sparing mastectomy and immediate reconstruction and breast-conserving surgery for small tumours.

We agree that overall and disease-free survival are the main aims of cancer treatment, and that these aims can be attained effectively by standard breast-conserving surgery procedures. We welcome the words of caution given in the letter that oncological safety must take precedence over cosmetic outcome. OBS does not require wider tumour-free margins than standard breast conservation treatment, and we consider a tumour-free margin of 2 mm to be adequate. The tumour's cavity can be marked with metallic clips in order to guide the delivery of radiotherapy, if required.

We would most respectfully disagree with the assertion that oncoplastic breast conserving surgery has a negative impact on patient outcome in terms of survival and morbidity. There is robust evidence that oncoplastic breast conserving surgery provides excellent disease-free survival (96% at 7 years) [1]. Oncoplastic breast conserving surgery presents a viable alternative to standard wide local excision which is shown to be associated with a high re-excision rate (12.9% vs. 6.5%) [2]. The incidence of local control and survival has been shown to be similar for locally advanced breast cancer between oncoplastic and non-oncoplastic breast conserving surgery. These results have been replicated in large series with long follow-up with high (88%) patient satisfaction with the aesthetic outcome [3,4].

The authors of the letter state that oncoplastic breast procedures are associated with a higher rate of complications. The analyses from the American College of Surgeons National Surgical Quality Improvement Program database confirm that the use of OBS does not confer an increased risk of surgical complications, despite the longer operative time [5]. Thus, the role of adequate training, informed patient consent and appropriate patient selection cannot be over-emphasised. We assert that we do not advocate attainment of aesthetic excellence at the expense of compromise of oncological safety. Our article purports to say that it is possible to attain both these objectives in a vast majority of patients with surgical techniques, planning, and training.

#### References

- 1. Nizet JL, Maweja S, Lakosi F, et al. Oncological and surgical outcome after oncoplastic breast surgery. Acta Chir Belg 2015;115:33-41.
- 2. Cali Cassi L, Vanni G, Petrella G, et al. Comparative study of oncoplastic versus non-oncoplastic breast conserving surgery in a group of 211 breast cancer patients. Eur Rev Med Pharmacol Sci 2016;20:2950-4.
- 3. De Lorenzi F, Hubner G, Rotmensz N, et al. Oncological results of oncoplastic breast-conserving surgery: long term follow-up of a large series at a single institution: a matched-cohort analysis. Eur J Surg Oncol 2016;42:71-7.
- 4. Rezai M, Knispel S, Kellersmann S, et al. Systematization of oncoplastic surgery: selection of surgical techniques and patient-reported outcome in a cohort of 1,035 patients. Ann Surg Oncol 2015;22:3730-7.
- 5. Cil TD, Cordeiro E. Complications of oncoplastic breast surgery involving soft tissue transfer versus breast-conserving surgery: an analysis of the NSQIP database. Ann Surg Oncol 2016;23:3266-71.