Re-defining Breast Cancer care in an LMIC- a single center study on long term oncological and cosmetic outcomes of Oncoplastic Breast Surgery

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INTRODUCTION

- Oncoplastic breast surgery (OBS) addresses the limitations of standard breast-conserving surgery while maintaining oncologic safety with improved margins and cosmetic results.[1,2]
- Beyond long-term risks like death or recurrence, poor cosmesis also causes significant psychosocial distress, especially among South-East Asian women.[3]
- We reviewed the long-term oncological and cosmetic outcomes of early-stage breast cancer patients undergoing OBS at our institution.

MATERIALS & METHODS

Single-center retrospective study
Aga Khan University Hospital
(January, 2017 - June, 2022)
ERC 2025-11482-34955

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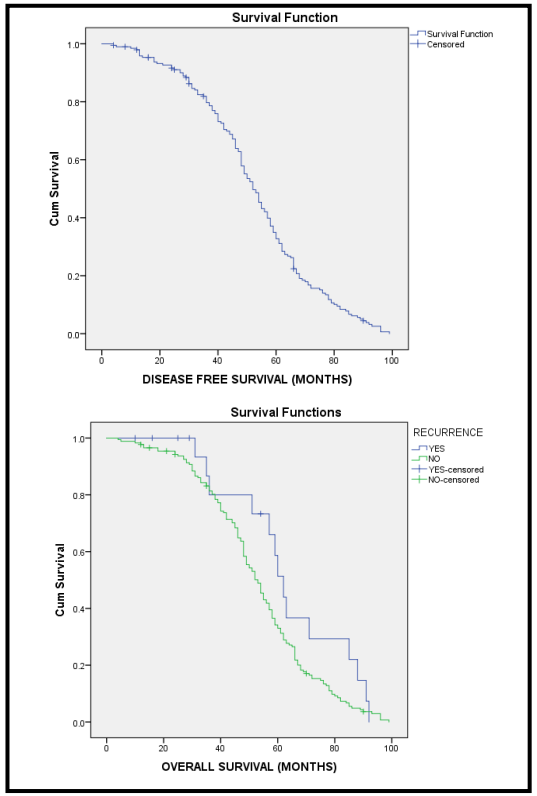
Inclusion: Females, > 18 years, stage I to III breast cancer, underwent OBS (**n=194**)
Exclusion: bilateral breast surgery

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Outcomes and Associations:
Margin re-excision
Ipsilateral breast tumor recurrence (IBTR)
Disease-free survival (DFS)
Overall survival (OS)
Cosmetic outcomes (patient reported)

RESULTS

- Mean age: 48.3 ± 13.2 years
- Neoadjuvant systemic therapy - 49% (n=95)
- Level 2 Oncoplasty was performed in 37 patients (Matrix rotation, local rotation and latissimus dorsi flaps).
- Margin re-excision was required in 7(3.6%) patients. IBTR in 9 (4.6%).
- Kaplan Meier analysis - mean OS 96 months (95% CI=92.2-99.7) since diagnosis, with death as the outcome event.
- The mean DFS was 93 months (95% CI=89.5 - 97.6) since diagnosis until recurrence as the outcome event..



OS and DFS kaplan-meier analysis

- Self-reported cosmetic outcomes (n=124/182), 51% reported 'Good' and 40% reported 'Excellent' when compared to the contralateral breast.

DISCUSSION

- OBS is a relatively novel, yet upcoming concept in our developing country.
- Financial constraints make patients' hesitant to risk re-excision and influence surgical choices. An additional burden on the surgeon is to deliver optimal cosmetic outcomes with no intervention to the contralateral breast.
- Nevertheless, the results of our study are comparable to published literature with a low margin re-excision rate (3.6%) and good OS and DFS.[2]
- Breast conservation with good cosmesis crucial to the emotional and psycho-social well-being of breast cancer patients.

CONCLUSION

OBS is a safe, effective option for early breast cancer, with low margin positivity, good long-term outcomes and cosmesis supporting its wider use, even in resource-limited settings.

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