

**Onco-plastic Surgery a Good Alternative to Conventional Breast Conserving Surgery in Low Middle Income Countries.**

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**ABSTRACT**

**Introduction:**

Breast conserving surgery (BCS) has gained popularity over mastectomy in the past decade having advantages of higher patient satisfaction with cosmetic outcomes and better quality of life.<sup>1</sup> Despite this a frequent pitfall of BCS is need for Re operation for positive surgical margins and local recurrence with a reported frequency of 17 to 59%<sup>2,3</sup>. Re-excision for wider margins comes at the cost of poor cosmesis and breast asymmetry which can lead to significant patient dissatisfaction, poor psychosocial function and increased morbidity.<sup>3</sup> Also more than half of patients opt for mastectomy with or without reconstruction when offered second surgery in case of positive margins after BCS<sup>4,6</sup>. Thus adding significant economic cost which is a major issue to already overburdened health care systems with limited resources in developing world<sup>5,6</sup>. Onco-plastic surgery (OPS) has address this problem concept in developing countries with few trained onco-plastic breast surgeons<sup>9</sup> without compromising aesthetic outcomes and oncological safety offering a pragmatic alternative to mastectomy and BCS.<sup>7,8</sup> However, onco-plastic surgery is still an emergent. We sought to determine the rate of positive surgical margins, reoperations and local recurrences between conventional BCS and OPS so the change in practice can be adopted in developing countries for a more economical approach.

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### Methods:

A retrospective study cross sectional study was conducted on Stage I to Stage III Breast Cancer patients who underwent BCS or OPS at two tertiary care hospitals of Karachi, Pakistan from 1st August 2016 to 31<sup>st</sup> December 2019. Data was collected by reviewing files and electronic records.

Data was analyzed using SPSS version 24.0.

### Results:

A total of 312 patients were included in the study, where 130 (41.6%) underwent BCS and 182 (58.3%) underwent OPS. The median age of the entire cohort was 50 yrs. Out of these, 18 patients (5.8%)  $p < 0.001$ , had positive margins on histopathological analysis, and all were in BCS group. 5 patients (1.9%) underwent margin re-excision, and 3 (1.2%) showed presence of residual tumor cells in the specimens resected. The other 10 patients did not consent for a second surgery. Local recurrence was seen in 8 cases.

### Conclusion:

Although breast conserving surgery has taken over total mastectomy, concerns still remains .Oncoplastic surgery has proven to be a safer alternative in terms cosmetic outcomes, oncological safety and a more economical approach. This highlights the need to modify current surgical practice in developing countries.

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