The Impact of Immediate Contralateral Breast Symmetrization on Body Satisfaction Among Breast Cancer Survivors

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Introduction

Oncoplastic approaches combine oncologic resection with plastic techniques and may include immediate contralateral symmetrization (reduction/mastopexy) to optimize cosmesis. Evidence isolating the effect of contralateral symmetrization (without implants) on patient-reported body image/self-esteem remains limited. **Objective**: To evaluate whether immediate contralateral symmetrization is an independent determinant of body image/quality-of-life 12 months after completion of breast cancer treatment.

Methods and Materials

Design: Cross-sectional study at a public state hospital (SP/ Brazil).

Cohorts:

Control group (CG): BCS alone (quadrantectomy/lumpectomy)
Study group (SG): BCS + immediate contralateral symmetrization (mammaplasty, no implants).

- All surgeries by the same breast team.

Eligibility: ≥21 years, curative BCS, ≥12-month follow-up; exclusions: bilateral cancer, other malignancies, recurrence, >1 breast surgery, illiteracy or inability to consent, death.

Data collection: Retrospective chart review and face-to-face interviews using the Body Dysmorphic Disorder Examination (BDDE), validated Portuguese version.

Outcomes: Self-rated breast satisfaction (excellent/good/fair/very bad) pre- and post-op; BDDE total score (0–168; >66 suggests body-image disorder).

Statistics: Categorical variables by Pearson χ^2; age as mean ±SD compared by Student's t test (normality checked). Significance $p<0.05$. Stata v18. **Ethics**: Research Ethics Committee)approval; written informed consent obtained.

Results

Baseline: Groups broadly similar in sociodemographic/clinical features; most were white, married/stable union, multiparous; BMI predominantly overweight/obese (table1).

Tumors and treatment: Mostly <2 cm (81,82% in the CG and 77,14% in SG) and luminal subtype; upper-quadrant predominance.

All received radiotherapy; endocrine therapy frequent in both; sentinel node technique predominated. SG had higher use of (neo)adjuvant chemotherapy (74,29% SG and 36,37% CG, *p 0,017*).

Breast satisfaction: subjective evaluations on table 2.

BDDE *(Body Dysmorphic Disorder Examination):* 56/57 scored <66 (low dissatisfaction). One CG patient scored 105.

Table 1. Sociodemographic Characteristics (most relevant)

Variable	Control group (n = 22)	Study group (n = 35)	p value
Age, mean ± SD	60.09 ± 1.76	60.43 ± 1.92	**0.048**
Active sex life			0.439
No	13 (59.09)	17 (48.57)	
Yes	9 (40.91)	18 (51.43)	
Menopause			**0.040**
No	0 (0%)	6 (17.1%)	
Yes	22 (100%)	29 (82.9%)	
Body mass index			0.426
Normal (18.5–24.9)	5 (22.7%)	11 (31.4%)	
Overweight (25–29.9)	7 (31.8%)	14 (40.0%)	
Obesity (≥30)	10 (45.5%)	10 (28.6%)	

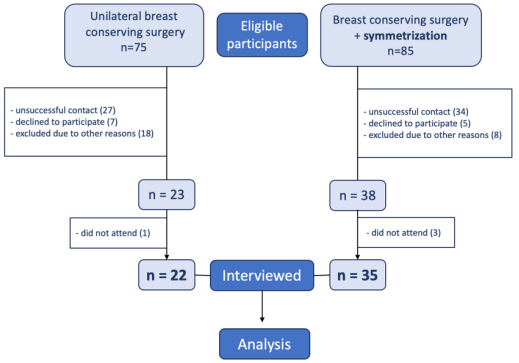


Table 2. Participants' Satisfaction with Breast Appearance

Overall satisfaction	Control group (n = 22)	Study group (n = 35)	p value
Before surgery			0.293
Excellent	6 (27.3%)	5 (14.3%)	
Good	14 (63.6%)	21 (60.0%)	
Fair	2 (9.1%)	6 (17.1%)	
Very bad	0 (0%)	3 (8.6%)	
After surgery			0.118
Excellent	3 (13.6%)	11 (31.4%)	
Good	11 (50.0%)	9 (25.7%)	
Fair	5 (22.7%)	13 (37.1%)	
Very bad	3 (13.6%)	2 (5.7%)	

Discussion

Breast-conserving surgery associated with radiotherapy often results in asymmetry, affecting aesthetic satisfaction in up to 30% of patients.

However, In this study **no significant differences were observed in aesthetic perception or body satisfaction** between patients who underwent symmetrization and those who did not. Most reported their satisfaction as "excellent" or "good," and BDDE scores were low in both groups. Only one patient from the control group presented a score indicating severe body image distortion.

Although factors such as obesity and radiotherapy could interfere with results, they did not have a relevant impact on patients' perceptions.

Literature remains mixed; some series show higher satisfaction with oncoplastic approaches, while a recent meta-analysis found no overall difference between bilateral mammaplasty and conventional BCS, with potential benefit in large/multicentric tumors.

The study also highlights limitations such as sample size and the unrestricted offering of symmetrization, regardless of prior patient preference. BDDE may be insensitive to post-oncologic aesthetic nuances.

Conclusions

In this study, immediate contralateral breast symmetrization among postmenopausal women was not associated with a statistically significant improvement in body-image. These results highlight the complexity of factors influencing body perception after a breast cancer diagnosis and emphasize the need for careful indication of oncoplastic procedures. In this context, immediate contralateral breast symmetrization should not be recommended indiscriminately, and the indication should be made on an individualized basis.

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