

Postoperative Quality of Life in Ethnic and Racial Minority Women Undergoing Contralateral Prophylactic Mastectomy with Breast Reconstruction

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BACKGROUND

While the rates of reconstruction tend to be lower in non-English speaking women, potential disparities in satisfaction with surgical outcome in those who do pursue reconstruction is not clearly defined. Here, we aim to compare patient-reported outcomes and quality of life measures in English and Spanish-speaking women undergoing breast reconstruction after mastectomy.

OBJECTIVE

The aim of this study was to evaluate postoperative satisfaction and quality of life in women who chose to undergo contralateral prophylactic mastectomy (CPM) with bilateral reconstruction compared to those opting for unilateral procedures.

METHODS

- Women with unilateral breast cancer undergoing immediate reconstruction were prospectively enrolled in a broader long-term breast reconstruction outcomes study between June 2015-September 2017.
- Women were divided into two cohorts: unilateral and bilateral (unilateral+CPM).
- Patient demographics, body mass index (BMI), cancer characteristics, adjuvant therapy, mastectomy weight, and complications were analyzed.
- Preoperative and postoperative BREAST-Q survey data were collected and compared between groups. Postoperative surveys were completed between six months and one year after the initial operation.
- Bivariate tests were performed to compare patient baseline demographics, clinical characteristics, and complication incidence.
- BREAST-Q scores both time points and postoperative-preoperative BREAST-Q score difference between groups were compared using two sample independent t-tests.

RESULTS

Table 1. Baseline patient characteristics

	Total	Unilateral	CPM	p-value
Patients (n)	63	36	27	
Age, years	48.7 ± 8.9	51.7 ± 8.1	44.4 ± 8.0	<0.01
BMI	30.4 ± 5.6	29.9 ± 6.1	31.2 ± 4.9	0.4
Race/Ethnicity				0.07
Hispanic	29 (50.0)	17 (50.0)	12 (50.0)	
Black	23 (39.6)	11 (32.4)	12 (50.0)	
Other	6 (10.3)	6 (17.7)	0 (0.0)	
Education				0.78
High school diploma or less	42 (72.4)	24 (72.7)	18 (72.0)	
College or more	16 (27.6)	9 (27.3)	7 (28.0)	
Income				0.44
Less than \$20,000	24 (50.0)	11 (42.3)	13 (59.1)	
\$20,000-80,000	20 (41.7)	12 (46.2)	8 (36.4)	
\$80,000 or more	4 (8.3)	3 (11.5)	1 (4.6)	
Employment Status				0.71
Not currently employed	37 (62.7)	22 (64.7)	15 (60.0)	
Full or part-time work	22 (37.3)	12 (35.3)	10 (40.9)	
Marital Status				0.79
Partnered	22 (37.9)	13 (39.4)	9 (36.0)	
Not-partnered	36 (62.1)	20 (60.6)	16 (64.0)	

*Categorical variables reported as n(%); continuous variables reported as mean±SD

- Mean age of the two groups differed significantly (CPM 44.4 ± 8.0; unilateral 51.7±8.1; p<0.001).
- Women in CPM group had higher rates of adjuvant therapy (CPM=33.3% both chemo and radiation, unilateral=5.6%; p=0.04).
- Rate of any complication was higher in CPM group (CPM=52.9%, unilateral=25.0%; p=0.03).
- The mean postoperative survey time was 10.2±5.2 months (unilateral 9.9±5.3 months, CPM 10.6±5.2 months; p=0.62).
- For satisfaction with breasts, mean postoperative-preoperative score difference varied between groups (CPM=8.4 ± 27.5, unilateral=-11.4 ± 26.1; p<0.01).

CONCLUSIONS

Patients electing CPM are younger with more advanced disease than those who selecting unilateral management. Despite higher rates of complications, patients undergoing CPM display improved satisfaction with breasts postoperatively.

Table 2. Clinical Characteristics

	Total	Unilateral	CPM	p-value
Cancer				0.11
DCIS	13 (20.6)	10 (27.8)	3 (11.1)	
Invasive	50 (79.4)	26 (72.2)	25 (88.9)	
Adjuvant treatment				0.04
None	25 (39.7)	16 (44.4)	9 (33.3)	
Chemo	13 (20.6)	8 (22.2)	5 (18.5)	
Radiation	14 (22.2)	10 (27.8)	4 (14.8)	
Both	11 (17.5)	2 (5.6)	9 (33.3)	
Average mastectomy weight, grams	804.7 ± 408.9	766.0 ± 413.1	862.8 ± 404.9	0.40
Reconstruction type				0.12
Immediate prosthetic	33 (52.4)	22 (61.1)	11 (40.7)	
Immediate autologous	9 (14.3)	6 (16.7)	3 (11.1)	
Delayed-immediate autologous	21 (33.3)	8 (22.2)	13 (48.2)	

Table 3. Breast-Q Survey Results

	Total	Unilateral	CPM	p-value
Satisfaction with Breasts				
Preoperative	57.0 ± 23.8	61.7 ± 21.4	51.2 ± 25.6	0.09
Postoperative	54.8 ± 20.6	51.8 ± 23.8	58.7 ± 14.9	0.19
Postoperative-Preoperative Difference	-2.87 ± 28.3	-11.4 ± 26.1	8.4 ± 27.5	<0.01
Psychosocial Well-Being				
Preoperative	63.8 ± 20.6	65.6 ± 21.7	61.6 ± 19.4	0.47
Postoperative	62.1 ± 25.5	63.6 ± 29.1	60.2 ± 20.5	0.61
Postoperative-Preoperative Difference	-1.7 ± 26.1	-2.5 ± 28.3	-0.85 ± 24	0.81
Physical Well-Being: Chest				
Preoperative	73.4 ± 15.0	74.1 ± 15.8	72.5 ± 14.3	0.71
Postoperative	64.9 ± 15.9	64.7 ± 18.1	65.1 ± 13.2	0.92
Postoperative-Preoperative Difference	-8.0 ± 14.5	-9.1 ± 13.3	-6.8 ± 15.9	0.56
Physical Well-Being: Abdomen				
Preoperative	76.9 ± 22.1	77.4 ± 20.2	76.2 ± 24.8	0.84
Postoperative	70.7 ± 25.3	75.0 ± 25.1	66.2 ± 25.3	0.26
Postoperative-Preoperative Difference	-5.6 ± 30.1	-0.35 ± 34.1	-10.2 ± 26.2	0.33
Sexual Well-Being				
Preoperative	56.5 ± 27.5	58.0 ± 29.5	54.5 ± 25.2	0.64
Postoperative	45.4 ± 25.9	48.1 ± 27.8	42.3 ± 23.9	0.42
Postoperative-Preoperative Difference	-12.6 ± 33.3	-9.5 ± 31.2	-16 ± 35.9	0.51
Postoperative-Only Domains				
Satisfaction with Outcome	68.9 ± 21.1	71.3 ± 22.7	65.9 ± 18.9	0.32
Satisfaction with Information	74.6 ± 20.0	75.3 ± 20.2	73.8 ± 20.2	0.77