Patient-Reported Satisfaction and Health Related-Quality of Life in Patients Converting from Prosthetic to Autologous Breast Reconstruction

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Abstract

Background: Both rates of breast reconstruction and implant use have increased in the last decade (1,2). Despite this trend, it is not uncommon for women to elect autologous reconstruction following successful tissue expander/implant reconstruction. The aim of this study was to determine whether satisfaction and HR-QOL differs following each breast reconstruction procedure for individual conversion patients.

Methods: From 1991-2013, 242 patients at a single intuition were identified as conversion patients. The BREAST-Q Reconstruction module consists of independent scales (scores 0-100) that evaluate two domains, 1) Satisfaction: Satisfaction with Breasts, Outcome, Care and 2) HR-QOL: Psychosocial, Sexual, and Physical well-being. Prospectively collected BREAST-Q data was available for n=59 (24.4%) patients at one of three time points (post-tissue expander placement, post-implant placement, post-autologous reconstruction). Twenty-seven patients completed at least one BREAST-Q scale post-tissue expander/implant placement AND post autologous reconstruction. Paired t-tests were conducted for each scale to assess individual change in patient satisfaction and HR-QOL.

Results: The study sample (n=59) was characterized by a mean age at tissue-expander placement of 48.3 ± 7.5 (34.0–64.0) years; average months between autologous reconstruction and BREAST-Q scale completion of 33.8 ± 32.7 (1.3 –119.3); 52% underwent unilateral reconstruction, and 33.9% did not receive radiotherapy. On paired analysis, between post-TE/implant surgery and post autologous surgery, patients reported a higher mean score for Satisfaction with Breasts (37 v 69, P=0.001), Satisfaction with Outcome (61 v 84, P=0.050), Sexual Well-being (33 v 52, P=0.044) and Physical Well-being (67 v 79, P=0.001). Satisfaction with Care scales (surgeon, information, medical team and office staff) did not differ on individual or group-level analysis following implant and autologous breast reconstruction.

Conclusions: Achieving patient satisfaction and improving or maintaining HR-QOL are important outcomes of breast reconstruction surgery. As healthcare resources are under increasing scrutiny, understanding how different techniques of breast reconstruction impact patient satisfaction and HR-QOL is crucial information for patients, clinicians, policy-makers and quality-improvement efforts. This study suggests that patients who have experienced both implant and autologous breast reconstruction report significant improvements in Satisfaction and HR-QOL following autologous reconstruction.

References

1. Albornoz, C. R., Bach, P. B., Mehrara, B. J., et al. A paradigm shift in U.S. Breast reconstruction: increasing implant rates. *Plast Reconstr Surg,* 131:15-23, 2013.
2. Cemal, Y., Albornoz, C. R., Disa, J. J., et al. A paradigm shift in U.S. breast reconstruction: Part 2. The influence of changing mastectomy patterns on reconstructive rate and method. *Plast Reconstr Surg,* 131:320e-326e, 2013.

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