

Patient-Reported Satisfaction and Quality of Life Following Unilateral Pedicled and Free Abdominal Flap Reconstruction: Is There a Difference?

Jonathan A Schwitzer, Amie Scott, H. Catherine Miller, Evan Matros, Andrea L Pusic, Colleen M McCarthy, Babak J Mehrara, and Joseph J Disa.

Abstract:

Purpose: In 2012, 12,533 abdominal flap breast reconstructions were performed in the USA, 63.8% of all autologous breast reconstructions performed.¹The purpose of this study was to compare patient-reported satisfaction and quality of life between unilateral pedicled and free abdominal flap reconstruction using the BREAST-Q.

Methods: Women undergoing unilateral post-mastectomy breast reconstruction using pedicled or free abdominal flaps were identified from two prospectively maintained databases at two sites in North America from 2008-2013, and were asked to complete the following BREAST-Q scales post-operatively: Satisfaction with Breasts, Satisfaction with Outcome, Psychosocial Well-being, Sexual Well-being, Physical Well-being Chest, and Physical Well-being Abdomen. BREAST-Q scores (range 0-100) were assessed for each domain and compared between pedicled and free abdominal flap patients based on time from reconstructive surgery to BREAST-Q completion. Higher scores indicate greater satisfaction/outcome.

Results: Of the 138 patients who completed the BREAST-Q, 84 (60.9%) underwent pedicled flap reconstruction and 54 (39.1%) underwent free flap reconstruction. Pedicled patients were older (mean 54.3 years v 51.4, $p=0.02$), had longer length of time from reconstruction to BREAST-Q completion (mean 3.98 years v 2.90, $p<0.01$), and were more likely to have undergone immediate reconstruction (77.4% v 61.1%, $p=0.03$). Among patients who completed the BREAST-Q at < 3 years post-op ($N=55$), pedicled patients scored higher than free flap patients in all six scales, with this difference reaching statistical significance in Satisfaction with Breasts (+11.6, $p=0.01$) and Sexual Well-being (+15.0, $p=0.03$). However, among patients at ≥ 3 years from time of surgery to BREAST-Q completion ($N=83$) there were no significant differences between the two groups on any of the BREAST-Q scales, with pedicled patients scoring higher in Satisfaction with Breasts (+5.2, $p=0.30$), Psychosocial Well-being (+3.3, $p=0.53$), Sexual Well-being (+3.7, $p=0.52$), and Physical Well-being-Chest (+2.6, $p=0.45$), and free flap patients scoring higher in Satisfaction with Outcome (+5.3, $p=0.36$) and Physical Well-being Abdomen (+5.1, $p=0.35$).

Conclusions: Decision-making in breast reconstruction can be difficult as patients are often offered many options, including pedicled and free abdominal flap reconstruction. In this study, patients who underwent unilateral pedicled flap reconstruction had greater initial satisfaction compared to those who underwent free flap reconstruction. However, among patients at ≥ 3 years post-op, there were no statistically significant differences between the two groups on any of the BREAST-Q scales. Thus, patients may be equally satisfied with either reconstruction, or rather patient satisfaction equalizes between the two over time. These results can be used to facilitate clinical and patient decision-making in the setting of autologous breast reconstruction.

References:

1. 2012 Plastic Surgery Statistics Report: 2012 Reconstructive Demographics. *American Society of Plastic Surgeons*. February 19, 2014. <http://www.plasticsurgery.org/Documents/news-resources/statistics/2012-Plastic-Surgery-Statistics/reconstructive-surgery-demographics.pdf>

Disclosure/Financial Support:

The BREAST-Q is owned by Memorial Sloan-Kettering Cancer Center and the University of British Columbia. Dr. Pusic is a co-developer of the BREAST-Q and receives a share of licensing revenues based on the inventor sharing policies of these two institutions

