

The impact of Implementing a Standardized Postoperative Pathway on Underserved Patients Undergoing Microsurgical Breast Reconstruction

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Purpose: There is paucity of knowledge regarding the impact of variation in postoperative care for microsurgical breast reconstruction patients. Currently, both optimizing patient outcomes and decreasing the cost of healthcare are of prime concern. Caring for underserved populations presents greater challenges in this realm for many reasons. Our aim was to understand the impact of initiating a standardized postoperative pathway for underserved patients undergoing microsurgical reconstruction.

Methods: A retrospective review of all patients who underwent microsurgical breast reconstruction at Montefiore Medical Center from January 2012-January 2015 was conducted. A standardized postoperative care pathway was implemented in January 2014. Patients were divided into two cohorts, those having microsurgical breast reconstruction after the pathway was implemented and those who had variable postoperative care prior to pathway. Primary dependent variables analyzed included postoperative complications and hospital length of stay. The Independent variables analyzed included demographic information, timing of reconstruction, flap type, sidedness of surgery, adjuvant therapy, and average operating room time. Characteristics and outcomes were compared using Fishers exact test and general linear models for continuous and categorical data, respectively.

Results: A total of 78 patients undergoing 104 flaps were included for analysis. Twenty-six patients (33.3%) undergoing 34 flaps (32.7%) were in the control cohort (prior to implementation of the standardized pathway) and 52 (66.66%) patients undergoing 70 flaps (67.3%) were included in the standardized cohort. When comparing cohorts there was no difference between, age, medical comorbidities, smoking status, timing of reconstruction, or radiation/chemotherapy status. However, the average length of stay for patients having postoperative care with a standardized pathway was significantly shortened by 1.3 days when compared to the control group (4.69 ± 1.33 versus 6 ± 2.60 ($p < 0.05$)). There was additionally no difference in postoperative complications including arterial thrombosis, venous thrombosis, fat necrosis, mastectomy skin flap necrosis, and wound healing problems between the two cohorts.

Conclusions: Using a standardized postoperative pathway for the care of underserved patients undergoing microsurgical breast reconstruction yields a significant decrease in hospital length of stay without increasing postoperative complications.