

Effect of an Enhanced Recovery Program on Length of Stay for Microvascular Breast Reconstruction Patients

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Introduction: Perioperative care in the United States is often costly and fragmented, particularly for complex episodes of care. Our group has recently demonstrated how care redesign built upon enhanced recovery after surgery (ERAS) principles can decrease length of stay, postoperative complications, and cost of care for colorectal surgery patients.¹ However, there is little data surrounding such efforts for microvascular breast reconstruction patients.²

Methods: Following the same principles from earlier care redesign efforts¹, we implemented an ERAS pathway for all microvascular breast reconstruction patients in August 2015. After IRB approval, records were obtained for all elective microvascular breast reconstruction procedures performed for Phase 0 (2/1/2012-8/16/2015) and Phase 1 (8/17/2015 - 1/31/2016). Patient age and BMI were obtained along with intraoperative morphine equivalents. Case mix index and length of stay were abstracted from hospital billing records.

Results: 154 charts were reviewed; 125 in Phase 1 and 29 in Phase 2. There were no differences in baseline characteristics between the two groups. Median length of stay was reduced in the ERAS group (4.36 vs 3.37, $p = 0.002$). Intraoperative morphine equivalents were also reduced in the ERAS group (44.71 vs 11.90, $p < 0.001$). Readmission rates were unchanged between the groups.

Conclusion: The ongoing ERAS pathway development by our Perioperative Consult Service for patients undergoing microvascular breast reconstruction significantly shortened median length of stay and decreased intraoperative opiate use while not affecting readmission rates.

References:

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