

# Quality of Recovery in Women Undergoing Autogenous Breast Reconstruction in an Ambulatory Setting

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## Abstract

### Background

In 2010, Women's College Hospital (WCH) in Toronto transitioned from an inpatient hospital to an ambulatory care hospital. In order to continue offering autogenous breast reconstruction, a multidisciplinary team developed a perioperative pain management protocol to facilitate early discharge. The purpose of this study was to evaluate quality of recovery in women undergoing pedicled transverse rectus abdominis myocutaneous (TRAM) or latissimus dorsi myocutaneous flap breast reconstruction in an ambulatory setting.

### Methods

A prospective cohort study was performed of all women presenting for autogenous breast reconstruction at WCH between 2011-2013. Patient-reported quality of recovery was measured on postoperative days 0, 2, 4 and 7 using the QoR-27. Self-reported pain and general health were also evaluated. Linear regression assessed trends in mean postoperative QoR-27, pain, and general health scores over time. Predictors of postoperative QoR-27 and pain scores were analyzed using panel regression analysis. Secondary analyses of delayed discharge (>24 hours) and complications are also provided.

### Results

Forty women (28-69 years) were included with an average body mass index (BMI) of 26.7 kg/m<sup>2</sup>. QoR-27 scores consistently improved over the postoperative period, with the greatest lag seen in the physical independence score. Lower total QoR-27 scores were associated with the extremes of BMI and higher American Society for Anesthesiologists (ASA) classification ( $p<0.05$ ). Worst pain scores were associated with the extremes of BMI ( $p<0.05$ ) and younger age ( $p=0.07$ ). Delayed discharge (24.1-28.25 hours) occurred in 40% of patients; all ASA class III patients experienced a delay in discharge.

### Conclusions

Patients undergoing expedited discharge following pedicled flap breast reconstruction demonstrated satisfactory quality of recovery and well-controlled pain over the first postoperative week. Patient selection is key to successfully performing autogenous reconstruction in an ambulatory setting, with the extremes of BMI and higher ASA class being risk factors for poorer quality of recovery and delayed discharge.

### Teaching Objectives

To understand quality of recovery following expedited discharge post autogenous breast reconstruction.

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