

A detailed description on unsupervised heterogeneous anomaly based intrusion detection framework

ABSTRACT

Purpose: This study aims to characterize complications, metabolic improvement, and change in ambulation status for patients with impaired mobility undergoing bariatric surgery.

Material and methods: Individuals undergoing primary sleeve gastrectomy (SG) or Roux-en-Y gastric bypass (RYGB) from February 2008 to December 2015 were included. Impaired mobility (WC) was defined as using a wheelchair or motorized scooter for at least part of a typical day. The WC group was propensity score matched to ambulatory patients (1:5 ratio). Comparisons were made for 30-day morbidity and mortality and 1-year improvement in weight-related comorbidities.

Results: There were 93 patients in the WC group matched to 465 ambulatory controls. The median operative time (180 vs 159 min, $p = 0.003$) and postoperative length of stay (4 vs 3 days, $p \leq 0.001$) was higher in the WC group. There were no differences in readmission or all-cause morbidity within 30 days. The median percent excess weight loss (%EWL) at 1 year was similar (WC group, 65% available, 53% EWL vs AMB group, 73% available, 54% EWL); however, patients with impaired mobility were less likely to experience improvement in diabetes (76 vs 90%, $p = 0.046$), hypertension (63 vs 82%, $p < 0.005$), and obstructive sleep apnea (53 vs 71%, $p < 0.001$). Within the WC group, 62% had improvement in their mobility status, eliminating dependence on wheelchair or scooter assistance.

Conclusion: Patients with both obesity and impaired mobility experience similar rates of perioperative morbidity and weight loss at 1 year compared to ambulatory controls. However, improvement in weight-related comorbidities may be less likely with impaired mobility.

Keyword: Bariatric surgery; Impaired mobility; Metabolic outcomes; Non-ambulatory; Roux-en-Y gastric bypass; Sleeve gastrectomy; Wheelchair bound