

Perioperative morbidity and 1-year outcomes of metabolic and bariatric surgery in solid-organ transplant recipients

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Background: Metabolic and bariatric surgery (MBS) may benefit solid-organ transplant recipients with obesity, but perioperative morbidity and 1-year outcomes under chronic immunosuppression remain incompletely described. We assessed 30-day morbidity and 1-year outcomes after MBS in this population.

Methods: Retrospective single-center case series (2010–2024). Outcomes included major intraoperative events (major bleeding defined as estimated blood loss >1 L), Clavien–Dindo (CD) grade \geq III complications, emergency department (ED) visits, 30-day readmissions, and 1-year total weight loss (TWL) and comorbidity evolution.

Results: Twenty-four recipients (18 kidney, including 1 kidney–pancreas and 1 repeat kidney transplant; 4 liver; 2 heart) underwent 26 MBS procedures (23 sleeve gastrectomies; 3 Roux-en-Y gastric bypasses, including 2 conversions after sleeve for reflux and weight regain). Mean age was 44.4 ± 8.9 years; 42% were female; mean preoperative BMI was 45.2 ± 7.1 kg/m². Mean time from transplant to MBS was 10.4 years (range 1–28). Preoperative hypertension, dyslipidemia, type 2 diabetes, and obstructive sleep apnea were present in 92%, 79%, 71%, and 67%, respectively. There was no mortality during the study period. Major intraoperative bleeding occurred in 3 (11.5%) cases: two were controlled laparoscopically and one required conversion to laparotomy with splenectomy and transfusion. One (3.8%) CD grade IV complication occurred: septic shock 16 days post-bypass attributed to pneumonia, managed in ICU. ED visits and readmissions occurred in 1 (3.8%) case each. Mean 1-year TWL was 20.6%. At 1 year, comorbidities improved/resolved in 87.5%.

Conclusion: In solid-organ transplant recipients, MBS achieved meaningful 1-year weight loss with acceptable short-term morbidity.