

Medium-term Outcomes of Bariatric Surgery in Adolescents: A Single Academic Center Experience

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Introduction: Obesity and related comorbidities are rapidly growing health problems among adolescents. Bariatric surgery as the definitive treatment for severe obesity is now accepted for adolescents. However, access to surgery in this population remains a challenge and at times controversial. Here we report the outcomes of the first group of adolescents with obesity who have undergone bariatric surgery at our center.

Methods: This is a retrospective review of adolescent patients who underwent bariatric surgery during 2018-2021. All patients were referred for surgery after a multidisciplinary discussion with members of the Centre of Excellence in Adolescent Severe Obesity (CEASO), which continues to follow the patients after surgery allowing for a safe transition of care to an adult obesity medicine team. Baseline demographics, body mass index (BMI), comorbidities, and postoperative outcomes were recorded. Descriptive statistics are displayed as count (percentage) or median (range).

Results: During 2018-2021, 14 patients were referred for bariatric surgery by CEASO and 13 patients (93%) underwent bariatric surgery. Median age was 17 (15-19) years old and nine patients (69%) were female. Median baseline BMI was 50.2 (38.4-75.2) kg/m². The most common comorbidities were obstructive sleep apnea and non-alcoholic fatty liver disease. Twelve patients underwent sleeve gastrectomy (92%), while one patient underwent a primary Roux-en-Y gastric bypass. Median follow-up time was 24 (3-24) months and was complete. The median postoperative BMI was 40.1 (25.9-58.6) kg/m² equivalent to a median percent excess weight loss (%EWL) of 54.7 (15.3-94.8) at last follow-up. There were no 90-day postoperative complications observed in this study cohort.

Conclusion: Bariatric surgery in adolescents in the context of a multidisciplinary bariatric program involving adolescent medicine specialists, is safe and effective as evident by our preliminary results. Longer follow-up with a larger volume of patients are needed to consolidate our conclusions.