Long-Term Outcomes in the Pediatric vs. Adult Populations Undergoing Bariatric Surgery

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Introduction

In 2024, 1 out of 23 pediatric patients qualified for bariatric surgery. However little data exists assessing the long-term outcomes in pediatric patients undergoing bariatric surgery. With this study, we aim to assess the long-term outcomes in pediatric patients undergoing bariatric surgery as compared to adults.

Methods

We identified all patients aged 18 and under who underwent bariatric surgery between the years 2015-2019 were identified. We compared this group of pediatric patients with adult patients aged 19-79 who underwent bariatric surgery during the same time frame. Our primary endpoint included weight loss 4 years after bariatric surgery. Our secondary endpoints included status of metabolic comorbidities and complications following surgery.

Results

- A total of 17 pediatric patients and 450 adult patients were included
- Mean age at time of surgery was 17.8 for pediatric and 42 for adult patients
- Mean BMI at time of surgery was found to be 43 for pediatric and 43.8 for adult patients (p=0.35)
- At 4 years post-operatively, mean BMI was 33.3 for pediatric and 33.6 for adult patients (p=0.84)
- There were no intraoperative or postoperative complications recorded for any pediatric patients
- One pediatric patient had PCOS on metformin and one had insulin dependent diabetes at time of surgery, both of which were discontinued by the 6-month follow-up visit

	Adult Patients	Pediatric Patients	P-value
Age at Surgery	42	17.3	
Mean BMI at Surgery	43.8	43	P=0.35
Mean BMI at 4 years	33.6	33.3	P=0.84

Conclusion

Bariatric surgery in the pediatric population is safe and leads to similar long-term weight loss when compared to adult patients. Bariatric surgery has the potential to improve metabolic comorbidities in the pediatric population. More research is warranted to further assess the trends identified in this study.