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## Outcomes in morbidly obese adolescent patients undergoing laparoscopic sleeve gastrectomy in the Indian subcontinent: A retrospective review

[Kirit Arumalla](#), [Vitish Singla](#), [Sandeep Aggarwal](#), [Harshit Garg](#), [Ritesh Goel](#), and [Varidh Katiyar](#)

Department of Surgical Disciplines, All India Institute of Medical Sciences, New Delhi, India

**Address for correspondence:** Dr. Sandeep Aggarwal, Department of Surgical Disciplines, All India Institute of Medical Sciences, Ansari Nagar, New Delhi - 110 029, India. E-mail: [sandeep\\_aiims@yahoo.co.in](mailto:sandeep_aiims@yahoo.co.in)

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### Abstract

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#### Introduction:

There is a worldwide increase in the prevalence of obesity among the adolescent population in India from 16.3% in 2001 to 19.3% in 2010. Recent evidence suggests that bariatric surgery leads to resolution of comorbidities and associated long-term complications in adolescent patients with morbid obesity.

#### Aim:

The aim of this study is to determine the impact of bariatric surgery on the weight loss and comorbidities of morbidly obese adolescents.

#### Materials and Methods:

A retrospective review of the data of 10 adolescent patients, who underwent Laparoscopic Sleeve Gastrectomy at our institute (tertiary care hospital), from July 2009 to July 2016 was carried out.

#### Results:

Of the 10 patients, 4 patients had syndromic forms of obesity. The median age was 16.54 years. The median pre-operative weight and height were 112 kg and 154 cm, respectively, with a body mass index of 47.2 kg/m<sup>2</sup>. There was no intra-operative or post-operative complication except for suspected methylene blue toxicity in one patient which was treated conservatively. Median follow-up period was 1 year (0–5 years). The patients had an increase in excess weight loss (EWL) of 54.5% until the end of 1 year. There was a regain of weight between the 1<sup>st</sup> and 2<sup>nd</sup> year, followed by a sustained weight loss achieving 44.8% EWL at 3 years and 60% at the end of 5 years (only two patients followed up at 5 years). Similar results were found in syndromic patients. Among the four diabetic patients, three had complete resolution and one had improvement in diabetes status. Among the three patients with obstructive sleep apnoea, two patients had complete resolution, while one patient had improvement in symptoms. One patient with