To the Editor:

We read with great interest the recent article by Alqahtani et al. describing a single center’s experience with laparoscopic sleeve gastrectomy between 2008 and 2011 performed on 108 children and adolescents between 5 and 21 years of age. Of note, the study included a subgroup of 13 children, including 9 with genetic obesity syndromes associated with hyperphagia (7 children with Prader-Willi syndrome and 2 children with Bardet-Biedl syndrome). Eight of 13 children (62%) in the subgroup were younger than 14 years, including a 5-year-old girl with Prader-Willi syndrome with a preoperative body mass index of 31.8 kg/m² and a history of obstructive sleep apnea and cardiac arrests. Outcome data were reported for only 1 of 13 children in the younger than 14 years subgroup, a decline in body mass index from 31.8 to 17.1 kg/m² reported at 12 months after sleeve gastrectomy for the 5-year-old girl with Prader-Willi syndrome. Additional outcome data for the other 8 children with genetic causes of hyperphagia and the genetic syndrome diagnostic criteria for these children were unavailable in the article.

Prader-Willi syndrome is a complex genetic disorder resulting from loss of the paternal copy of chromosome 15q11.2-13 and is considered one of the most common causes of severe obesity affecting an estimated 350,000 to 400,000 individuals globally. Patients with Prader-Willi syndrome have an underlying defect in satiety, altered pain threshold, decreased ability to vomit, and increased risk for development of gastric dilation and necrosis. Bardet-Biedl syndrome is a pleiotropic autosomal recessive disorder affecting ciliary function (prevalence rates ranging from 1 in 125,000 to 1 in 160,000 for individuals of European ancestry to 1 in 18,000 among consanguineous populations) accompanied by an
increased risk for the development of severe obesity and diabetes mellitus.\textsuperscript{6,7} Published data regarding outcomes of bariatric procedures in patients with genetic and hypothalamic conditions associated with hyperphagia such as Prader-Willi or Bardet-Biedl are quite limited and in many series fairly disappointing.

The results of a patient with Bardet-Biedl syndrome who underwent Roux-en-Y gastric bypass with sustained drop in body mass index 52.3 to 34.9 kg/m\textsuperscript{2} at 42 months postoperatively with improvement in hypertension was published by Daskalakis et al \textsuperscript{8} in 2009. Deaths have been reported among individuals with Prader-Willi syndrome after restrictive bariatric procedures including laparoscopic silicone gastric banding and BioEnterics intragastric balloon placement.\textsuperscript{9,10} A long-term review of outcomes of bariatric surgery among individuals with Prader-Willi syndrome revealed suboptimal results in comparison with obese controls, advocating the use of a supervised hypocaloric diet with micronutrient supplementation, exercise, and restricted access to food, rather than the bariatric surgery procedures offered at that time, which did not include laparoscopic sleeve gastrectomy.\textsuperscript{11}

We would request that the authors publish additional information regarding the diagnostic criteria of the individual cases, including genetic confirmation where available, and individual longitudinal outcomes for their children with hyperphagic disorders after sleeve gastrectomy, ideally with follow-up over several years. This would provide invaluable information for the clinical management of individuals with genetic syndromes associated with hyperphagia and morbid obesity, such as Prader-Willi and Bardet-Biedl syndromes, and to determine whether, indeed, sleeve gastrectomy is a procedure that should be considered in this unique patient population.

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