

Pregnancy after bariatric surgery: risks and benefits



TO THE EDITORS: In the recent decade, bariatric surgery (BS) has become the mainstay of treatment for morbid obesity, because of its demonstrated efficacy in achieving significant weight loss and in improving obesity-related comorbidities. Up to 80% of patients who undergo BS are women of childbearing age. Because of this situation, coupled with the dramatic increase in the use of BS in the management of obesity, obstetricians are likely to encounter women who have undergone BS in their routine practice.

We read the publication by Kwong et al¹ with great interest. They performed a systematic literature review that evaluated maternal and perinatal outcomes after BS. The authors concluded that BS is associated with reduced rates of gestational diabetes mellitus, hypertensive disorders, excessive fetal growth, postpartum hemorrhage, and cesarean delivery and with an increased rate of small-for-gestational-age infants and preterm delivery. Despite the meticulous data gathering in their study, several important issues were not acknowledged.

Studies that have evaluate pregnancy outcomes after BS almost exclusively have included patients who underwent either gastric bypass (ie, malabsorptive procedure) or gastric banding (ie, a restrictive procedure) with limited information regarding outcomes after sleeve gastrectomy, which is a restrictive procedure that has become the most frequently used bariatric procedure. We recently have published a case-control study that included 119 patients after sleeve gastrectomy and 119 control subjects who were matched for preoperative body mass index, age, parity, delivery history, and delivery year.² We have shown a 3-fold increased risk for small-for-gestational-age infants in the post-sleeve gastrectomy group. This finding challenges the presumption that the observed risk of impaired fetal growth is due to malabsorption¹ and suggests that the deleterious effect on fetal growth may involve factors other than malabsorption.³

The optimal timing of pregnancy after BS, in regard to pregnancy outcomes, is still not well-established. The most recent practice guidelines cosponsored by the American Society of Metabolic and Bariatric Surgery, the Obesity Society, and the American Association of Clinical Endocrinology suggest delaying pregnancy for 12–18 months after surgery; the American College of Obstetricians and Gynecologists recommends a wait of 12–24 months to ensure that pregnancy does not occur during the rapid catabolic weight loss period, which theoretically may lead to fetal malnutrition and impaired growth.⁴ Because data regarding time to conception were not included in the aforementioned systematic review, we believe it represents a major limitation that should be acknowledged. ■

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REPLY



Thank you for your thoughtful letter to the editor regarding our meta-analysis on pregnancy outcomes in women who had undergone bariatric surgery.¹

We agree that there are few studies that have looked specifically at pregnancy outcomes of patients who undergo vertical sleeve gastrectomy; therefore, your data on pregnancy outcomes in these patients are important. In your study that observed women who underwent vertical sleeve gastrectomy, you found an increase in small for gestational age (SGA) infants and, because this is a restrictive procedure, suggest that the growth restriction may be due to other causes other than malabsorption.² We acknowledge that this is a possibility. Another possibility, however, is that the relative increase in SGA infants found in your study was a result of the choice of control group. The women in the control group were matched to the surgery patients by preoperative body mass index (average, 41 kg/m²) and thus were much heavier than the surgery group before pregnancy, in which the average body mass index was 28.9 kg/m². The less obese surgery group had an inherently higher risk of SGA simply because of their weight, as evidenced by Lamminpaa et al,³ compared with their obese counterparts. Therefore, your finding may reflect the control group that was used rather than the procedure itself. Another study that looked at pregnancy outcomes after vertical