

Bariatric Surgery Tied to Better Perinatal Outcomes

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Obese women who undergo bariatric surgery before pregnancy have significantly better perinatal outcomes, according to findings from a retrospective study of 808 deliveries.

When 507 deliveries after bariatric surgery were compared with 301 deliveries prior to such surgery, lower rates of diabetes mellitus and hypertensive disorders (11% vs. 17% and 11% vs. 24%, respectively) were seen in those who had prepregnancy surgery, investigators said in the *International Journal of Gynecology and Obstetrics* (doi:10.1016/j.ijgo.2008.07.008).

As for fetal outcomes, macrosomia occurred in 3% of postsurgery deliveries and 8% of presurgery deliveries, Dr. Adi Y. Weintraub of Ben-Gurion University of the Negev in Beer-Sheva, Israel, and associates wrote.

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All differences were statistically significant. After controlling for potential confounders, the researchers found bariatric surgery to be independently associated with a reduction in the incidence of each of these outcomes (odds ratios of 0.42 for diabetes mellitus, 0.38 for hypertensive disorders, and 0.45 for fetal macrosomia).

The findings are important given the increasing incidence of obesity—and a concomitant increase in adverse perinatal outcomes and comorbidities—in many nations throughout the world. In the United States and Israel, about a third of women of childbearing age were classified as obese between 1999 and 2002, for example. In the United Kingdom, about 40% of women in one study were classified as moderately or very obese.

“Weight loss before conception is the optimum way to decrease the risk for medical and obstetric complications in obese women of reproductive age,” according to the authors, who note that bariatric surgery has become an increasingly popular alternative to medical therapy and lifestyle changes, which have had limited success for maintaining long-term weight loss.

Previous studies have shown that pregnancies after bariatric surgery are uncomplicated and well tolerated by the mothers, despite the presence of gestational diabetes, and these findings are corroborated by those from the current study.

Women included in the current study delivered at a tertiary medical center from 1988 to 2006, and in those who delivered after bariatric surgery there was a significant reduction in the obesity rate (10% vs. 20%; odds ratio 0.43). Such a reduction indicates the surgical intervention was relatively successful, the researchers wrote.

No significant differences were seen between post- and prebariatric surgery pa-

tients in this study in the rates of recurrent abortion (6% vs. 4%), placental abruption (0.8% vs. 0.3%), premature rupture of the membranes (11% vs. 8%), intrauterine growth restriction (4% vs. 2%), or anemia (62% vs. 71%). Cesarean deliveries, however, were significantly more common in those who underwent bariatric surgery (30% vs. 18%).

Women who had bariatric surgery before delivery also had higher rates of previous Cesarean deliveries, and prior Cesarean de-

livery was the most common indication for Cesarean delivery among postsurgery patients. After controlling for previous Cesarean delivery, the difference in Cesarean rates between the post- and presurgery patients was no longer statistically significant. Fetal macrosomia, however, was the indication for Cesarean delivery in only 4% of postsurgery cases, compared with 15% of presurgery patients.

Limitations of the study include the fact that all forms of bariatric surgery

were included and grouped together (including restrictive and malabsorptive procedures and procedures performed using open and laparoscopic techniques). There also was a lack of information regarding body mass index and weight gain during pregnancy.

Based on their findings, the researchers concluded that bariatric surgery reduces maternal complications and fetal macrosomia, and that it is not an independent risk factor for adverse perinatal outcomes. ■



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