Bariatric Surgery Cuts Gestational BP Issues

BY JENNIE SMITH

Women who have had bariatric surgery are far less likely to experience serious hypertensive disorders during pregnancy, including pre-eclampsia and eclampsia, than women who have yet to undergo the surgery, according to new research.

Investigators found a 75% reduction in the odds of being diagnosed with a hypertensive disorder in pregnancy in those who had undergone the surgery, compared with their counterparts.

Pre-eclampsia or eclampsia was diagnosed in 14.5% of women in the presurgery group and 2.5% of those in the postsurgery group.

For their study, Dr. Wendy L. Bennett and colleagues at the Johns Hopkins University in Baltimore evaluated claims data from 7 private insurance plans to find 585 U.S. women between the ages of 16 and 45 who had undergone bariatric surgery for weight loss and had at least one prior pregnancy and delivery (BMJ 2010 Apr. 13;340:c1662 [doi: 10.1136/bmj.c1662]).

A total of 269 of the women delivered their babies before gastric bypass surgery or another weight-loss surgery, and 316 delivered afterward. For the first group, the mean time from delivery to surgery was 17.9 months, and for the second, the mean time from surgery to delivery was 23.6 months. The mean age of the women was 31.9 years at delivery and 31.5 years at surgery.

In the group that delivered before having surgery, 31.2% of the women were diagnosed with a hypertensive disorder—from chronic and gestational hypertension to pre-eclampsia and eclampsia alone or superimposed on hypertension—between the start of pregnancy and 2 weeks after birth, while only 9.8% of the post-surgery group did, even after adjusting for factors such as age at delivery, multiple pregnancy, the type of surgery, and pre-existing diabetes.

Pre-eclampsia or eclampsia was diagnosed in 14.5% of women in the presurgery group and 2.5% in the postsurgery group. "We went 2 weeks post partum, because we wanted to make sure we got all the diagnoses," Dr. Bennett said.

The Hopkins findings confirm those from an earlier Israeli study of similar design (Int. J. Gynecol. Obstet. 2008;103:246-51), which found the rate of a composite of hypertensive disorders during pregnancy to be more than halved after bariatric surgery.

The Hopkins team saw an even more dramatic reduction—about 75%—in the odds of all hypertensive disorders in pregnancy, and was able to isolate all severities of hypertensive disorders by analyzing outpatient and inpatient codes for each. Further, Dr. Bennett and colleagues wrote that they were "able to describe outcomes of chronic hypertension complicating a pregnancy and pre-eclampsia superimposed on chronic hypertension among women who have had bariatric surgery." Chronic hypertension in pregnancy and pre-eclampsia, the authors noted, can increase the long-term risk of chronic disease in the mother, including cardiovascular and renal disease.

Dr. Bennett's study reviewed relatively new and geographically diverse data, reflecting outcomes from surgeries currently performed, she said.

The team's dataset lacked height and weight information for the subjects before and after surgeries, though all had been diagnosed as obese (having a body mass index of 35 kg/m^2 or higher) before being scheduled for surgery. However, Dr. Bennett said, "We certainly believe it's the weight loss leading to reduced hypertension risk."

The authors noted a further limitation to their study, which was the possibility of selection bias and confounding by indication. "An obese woman with gestational hypertension might have been more likely to subsequently undergo bariatric surgery if she developed chronic hypertension after her pregnancy or had other comorbidities associated with obesity making her eligible for bariatric surgery. If this occurred, the number of diagnoses of hypertensive disorder in pregnancy in the women who delivered before surgery could be increased and bias our results." ■

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DRUGS, PREGNANCY, AND LACTATION

APA and ACOG: Perinatal Depression

Questions about the management of depression during pregnancy continue to elicit discussion in clinical and academic venues. In the last decade, there have been numerous studies and reports evaluating the impact of antidepressant use and maternal depression during pregnancy on fetal and neonatal well-being and on long-term neurobehavioral outcomes.

We have more data regarding the effects of prenatal exposure to psychiatric medications than perhaps to any other types of medication women use during pregnancy.

BY LEE COHEN, M.D.

A recent addition to the literature is a joint report from the American Psychiatric Association (APA) and the American College of Obstetricians and Gynecologists (ACOG) on the management of depression during pregnancy. The working group, convened by the APA and ACOG provided a critical review of the available English language literature on fetal and neonatal outcomes associated with exposure to mood disorder and antidepressant treatment during childbearing (Gen. Hosp. Psychiatry 2009;31:403-13; Obstet. Gynecol. 2009;114:703-13).

What's clear is that although pregnancy was once considered a time of emotional well-being, studies over the last decade suggest that pregnancy is not protective with respect to psychiatric disorders such as depression, and that a considerable proportion of women will experience an episode of depression while pregnant. Therefore, it is critical for clinicians to be familiar with the current state of knowledge regarding the effects of maternal depression and fetal exposure to antidepressants on various reproductive outcomes.

The working group's copious review suggests that the impact of maternal mood disorder on reproductive outcomes is extremely variable. For example, data on the effects of depression on outcomes such as fetal growth, preterm delivery, and various neonatal effects are highly inconsistent, with some studies suggesting depression during pregnancy is associated with low birth weight or small-for-gestational-age infants and an almost equal number suggesting no such effects.

Similarly, the substantial literature that has emerged over the last decade regarding the impact of antidepressants on birth outcomes has produced variable findings. The literature has been variable with respect to outcomes, such as the impact of fetal exposure to selective serotonin reuptake inhibitors (SSRIs) on birth weight; some studies have suggested that birth weight is lower with exposure, but others do not show this.

The authors of the joint report highlight the greatest methodological flaw in virtually all of the literature evaluating fetal exposure to antidepressants: the potential confounding factor of maternal mood disorder. We have yet to see a study that compares outcomes among babies born to euthymic women on antidepressants, compared with outcomes among babies born to women who do not have a mood disorder and are not taking these medications during pregnancy.

A concern among both patients and clinicians is the impact of SSRIs on the risk for congenital malformations. The APA/ACOG report, consistent with other reports, states that the cumulative data from prospective studies and administrative databases suggest that the absolute risk of major congenital malformations associated with fetal exposure to SSRIs is inconsistent, and that if there is a risk, it is exceedingly small.

The most consistent finding across the literature over the last decade regarding fetal exposure to SSRIs is the finding of transient neonatal adaptation symptoms that include irritability, tachypnea, and hypoglycemia among newborns of 15%-30% of women who use SSRIs in the latter part of pregnancy. Few would disagree that this is a syndrome that has been frequently documented in association with SSRI exposure, but the authors of the APA/ACOG report underscore that the syndrome is transient and does not appear to have particular clinical relevance, at least acutely.

Lastly, concerns regarding an increased risk of persistent pulmonary hypertension of the newborn (PPHN) have also been called into question, because of multiple studies with varying results, including one recent study not cited by the working group in which no increase in risk was noted and two earlier studies cited by the working group where a heightened risk for PPHN was described compared with a baseline rate of 0.5-2/1,000.

The working group provides the clinician with several schemata regarding the actual management of perinatal depression, with suggestions that vary based on whether a patient is pregnant already and whether she is being treated with an antidepressant. They suggest that women with milder cases of depression be treated with psychotherapy, with more serious consideration given to continuing pharmacologic treatment of perinatal depression in those with recurrent disease. They recommend that these approaches be considered in the context of a carefully tailored discussion that includes the risks and benefits of deferring treatment versus using the antidepressants.

Reading this report by seasoned investigators in both psychiatry and obstetrics and gynecology, one is left with the following conclusions: When it comes to managing perinatal depression, there are no perfect answers and no decision is risk free. Even with this exhaustive review, we don't have studies that direct the clinician in an absolute fashion to a particular treatment. Still, the clinician should be reassured by the numerous studies that have been conducted with antidepressants compared with other medicines that women take during pregnancy. With these data, clinicians can make thoughtful risk-benefit decisions as they collaborate with their patients, matching patient wishes and clinical histories with a given treatment decision that feels appropriate for that particular patient.

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