

Postpregnancy Weight Gain Ups C-Section Risk

BY SHERRY BOSCHERT

Women diagnosed with gestational diabetes who gained more than 10 pounds after the pregnancy significantly increased their risk for a cesarean delivery at the next pregnancy, a study of 2,581 women found.

In the study, 5% of women who returned to their prepregnancy weight after being delivered vaginally of a live singleton, or whose prepregnancy weight decreased by more than 10 pounds by the time of their next pregnancy, were delivered by cesarean section in that subsequent pregnancy. Of women whose prepregnancy weights increased by more than 10 pounds, however, 10% had cesarean deliveries in the subsequent pregnancy, Dr. Pathmaja Paramsothy and associates reported (*Obstet. Gynecol.* 2009; 113:817-23).

The risk for cesarean delivery was 70% higher in the weight-gain group after adjustment for the effects of confounding factors including maternal age, race/ethnicity, education, duration of birth interval, weight gain during each pregnancy, smoking, and year of birth, wrote Dr. Paramsothy and colleagues at the University of Washington, Seattle. The results were obtained in a retrospective analysis of linked birth-certificate data for women with at least two singleton births in Washington state from 1992 to 2005.

Of the 2,581 women studied, 35% were in the weight-gain group, 11% were in the weight-loss group, and 54% were in the weight-stable group.

Prepregnancy weight typically is measured at the first prenatal visit. The interpregnancy weight change was calculated by subtracting the prepregnancy weight for the subsequent pregnancy from the prepregnancy weight for the first pregnancy.

Previous studies have identified gestational diabetes, obesity, and excessive weight gain as independent risk factors for cesarean delivery and analyzed the effects of each separately. This may be the first study to look at the association between interpregnancy weight gain and subsequent cesarean delivery in women with gestational diabetes, a population that the investigators hypothesized would be at particularly high risk.

Women who gained more weight between pregnancies were more likely to deliver by cesarean at the subsequent pregnancy, with the risk increasing by 48%-136% depending on the number of pounds gained. Interpregnancy weight gain was more likely in women who were younger, African American or Hispanic, less educated, and more than 3 years from the initial pregnancy.

The rate of cesarean deliveries in the United States climbed from 6% in 1970 to 30% in 2005, potentially increasing the health risks for mothers and newborns and adding at least \$15 billion in costs to the health care system, the authors noted. Delivering physicians should counsel women with gestational diabetes about weight management between pregnan-

cies, Dr. Paramsothy and associates said.

Dr. Catherine Spong of the National Institute of Child Health and Human Development commented, "The take-home message from this is that interpregnancy weight gain is an important thing to keep in mind as you are managing patients with gestational diabetes.

"Not only do you want to test them for subsequent development of diabetes, but also monitor their weight gain to try to op-

timize subsequent pregnancy outcomes."

New attention is being paid to questions about how much weight a woman can safely gain during or between pregnancies. Guidelines from the Institute of Medicine focus mainly on preventing low birth weight, and aim for at least a 10-pound maternal weight gain during pregnancy but don't address the upper limits of weight gain during or between pregnancies, Dr. Spong said in an interview.

"Now, really, low birth weight isn't particularly the issue. It's the obesity epidemic," she said.

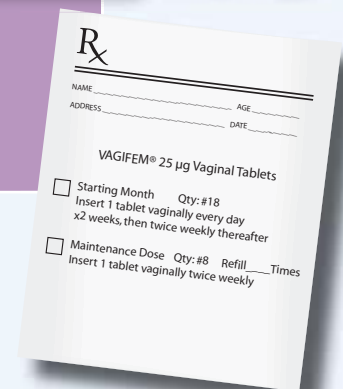
The Institute of Medicine is reviewing the guidelines and should produce new recommendations in the next few months that Dr. Spong hopes will also target obese and morbidly obese weight levels.

The investigators and Dr. Spong reported no conflicts of interest related to the study. ■

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References: 1. Data on file. Development report 448-2794 Vagifem. Novo Nordisk Inc, Princeton, NJ.
2. Data on file. Study report/VAG/PD/5/CAN. Novo Nordisk Inc, Princeton, NJ.
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