Risk of Childhood Obesity in the Toddler Offspring of Mothers With Gestational Diabetes

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1. Review the authors’ primary aim for this study. Define childhood obesity and overweight. Discuss the authors’ choice of body mass index (BMI) as an indicator of obesity and overweight in children. Are there other anthropometric measurements that would provide better criteria for your definition of obesity? Which measurement would you use to accomplish the authors’ primary aim?

2. Although many investigators have advocated ethnic-specific definitions of overweight and obesity in adult populations, the Centers for Disease Control and Prevention (CDC) growth charts for children are not ethnic-specific. Review the reasons for this decision (citation 11 in the article) and discuss the possible implications for the authors’ observations for the primary outcome.

3. Discuss the chronological pattern for the emergence of obesity in children. What is the adiposity rebound? Why did the authors choose to study children at 2–4 years of age? Do you agree with the authors’ choice? If not, when would you have evaluated the children?

4. What were the sources of the data for this study? Discuss the use of computerized perinatal databases for research. What are the advantages and disadvantages? How were the identities of the study participants and their children linked among the different databases? What information should authors supply to convince the readers of the accuracy and completeness of databases used for a retrospective cohort analysis?

5. What was the method of screening, diagnosing, and treating gestational diabetes mellitus (GDM) in this study? How does the authors’ method compare with the method you use in your practice? Do any differences affect the generalizability of the authors’ observations to the women with GDM in your practice? A useful discussion by Dr. Coustan on the diagnosis of gestational diabetes can be found in the Perspectives podcast and accompanying transcript.

6. Review the method of selecting study participants. Was the method the same for women with GDM as for the nondiabetic participants?

7. Discuss the maternal and infant demographics in Table 1. Compare these descriptive statistics to those of your own practice. What potentially significant differences do you observe? Discuss possible explanations for the higher cesarean delivery rate in the group of women with GDM.

8. Discuss possible explanations for the difference between groups in toddler follow-up. Explore whether the difference biases the analysis of this study.

9. The authors attribute the lack of a difference between groups in frequency of toddler overweight and obesity to “…the well-controlled nature of GDM in the women in the cohort.” What evidence do the authors present to demonstrate the degree of control of glucose intolerance in their study? What additional evidence, if any, do you want to see?

10. Review the recently released draft National Institutes of Health (NIH) consensus statement on diagnosing GDM. Does the present study contribute any evidence that conflicts with or would add new information to the consensus statement?