Terminal Fetal Heart Decelerations and Neonatal Outcomes

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(Obstet Gynecol 2013;122:1070–6)

1. What are the goals of this study? Discuss whether or not these goals are relevant to your population or practice.

2. How do the authors define terminal decelerations and bradycardia? Are these definitions consistent with those from the National Institute of Child Health and Human Development and the American College of Obstetricians and Gynecologists (Practice Bulletin No. 106)?

3. Describe how the researchers ascertained the information about the fetal heart rate patterns. Discuss any advantages and disadvantages of this approach.

4. What are the key study outcomes and how are they defined? How do the definitions of acidemia and metabolic acidosis compare to definitions used by the American College of Obstetricians and Gynecologists and the American Academy of Pediatrics in their joint publication, Neonatal Encephalopathy and Cerebral Palsy? Discuss any advantages or disadvantages of the definitions used in this study.

5. Summarize the results of the study. Does the study have sufficient power?

6. Refer to Figure 1 (the flow chart for the study) and Table 1, and discuss the generalizability of the study results.

7. If asked to design another study with the same goals, what would you replicate from the current study by Cahill and colleagues? What would you do differently?

8. Based on this study and the related literature, when faced with a parturient in the 2nd stage who develops terminal decelerations and bradycardia, after what duration of fetal heart deceleration would you: a) make the decision to proceed to operative delivery and b) like to actually complete delivery of the baby? Why?