Umbilical cord prolapse: are maneuvers always necessary to relieve cord compression?

TO THE EDITORS: I appreciate the very thorough review of Wong et al1 on umbilical cord prolapse, including their nomenclature classification and review of strategies to relieve pressure on the prolapsed cord. In the institutions where I have trained and practiced, the reflex reaction to any recognized cord prolapse has been to place a hand or fingers in the vagina to elevate the presenting part. The provider’s hand remains in the vagina until delivery, with both the patient and provider riding on the stretcher to the operating room, an uncomfortable experience for all involved. However, in cases of fetal bradycardia or prolonged decelerations, these maneuvers can be lifesaving.

What I believe is not emphasized enough in this expert review is the relatively high percentage of fetuses with cord prolapse who do not experience abnormal fetal heart rate patterns. In 1 review, the rate of bradycardia or severe fetal heart rate abnormalities ranged from 41% to 67%.2 In Wong’s previous publication of 114 cases of cord prolapse, they found 29.8% of fetuses with bradycardia, 26.3% of fetuses with fetal heart rate decelerations without bradycardia (typically with a good outcome), and 43.9% of fetuses with no fetal heart rate abnormality.3 If the lack of engagement of a presenting fetal part increases the risk of cord prolapse, it likely reduces the chance of cord compression by that same presenting part. That which predisposes also protects. Therefore, before immediately placing the patient in an uncomfortable knee-chest position or elevating the presenting part, I would advocate for continuous fetal heart rate assessment and a hands-off approach for those fetuses who do not experience decelerations or bradycardia.

In addition, I appreciate that the authors did not echo the oft-repeated warning about not palpating the cord to assess the fetal heart rate. It has been repeatedly written that such a practice could induce vasospasm of the umbilical vessels and lead to fetal bradycardia,2 without clear evidence of how this admonition began. It may have been related to early attempts to manually replace the cord, which was associated with adverse outcomes and thought to be related to compression or manipulation.4 However, I was unable to find any hard evidence that gentle palpation of the cord results in vasospasm.

As the authors have demonstrated, it is important to continuously challenge and reevaluate traditional practices involving umbilical cord prolapse.

Richard L. Fischer, MD
Division of Maternal-Fetal Medicine
Department of Obstetrics and Gynecology
Cooper University Hospital
Cooper Medical School of Rowan University
1 Cooper Plaza
Room 623, Dorrance Bldg.
Camden, NJ 08103
fischer-richard@cooperhealth.edu

The author reports no conflict of interest.

REFERENCES

© 2021 Elsevier Inc. All rights reserved. https://doi.org/10.1016/j.ajog.2021.12.009