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Uterine legacy of open maternal–fetal surgery: preterm uterine rupture



TO THE EDITORS: We congratulate Goodnight et al¹ on the publication of a study in the *Journal* in March of 2019 titled, “Subsequent pregnancy outcomes after open maternal-fetal surgery for myelomeningocele.” Using an international multicenter prospective observational registry, the authors’ analysis of 52 subsequent pregnancies after open maternal–fetal surgery (OMFS) for fetal myelomeningocele revealed that the risk of uterine rupture was 9.6% (5/52) and the additional risk of uterine dehiscence/thinness was 17.3% (9/52). The authors concluded that “the risk of uterine rupture or dehiscence in subsequent pregnancies with associated fetal morbidity after OMFS is significant, but similar to that reported for subsequent pregnancies after classical cesarean delivery.”¹ We believe this conclusion is inaccurate and trivializes the substantial risks associated with the uterine legacy of OMFS.

We acknowledge that the risk of uterine rupture after previous classical cesarean delivery varies in the literature, although the majority of studies report that risk to be less than 9.6%.² However, there is a fundamental difference that needs to be emphasized...and that is the *timing* of uterine rupture. Studies reporting the risk of uterine rupture after classical cesarean delivery typically describe a group of patients who underwent trial of labor and/or refused elective cesarean delivery at or near term.² The uterine ruptures in this study by Goodnight et al occurred at a median of 28 weeks (26.0–31.5 weeks) of gestational age. Two of these 5 cases (40%) involved fetal death. The current recommendation of elective repeat cesarean delivery, “at 36–37 weeks to reduce the risk of uterine rupture,”¹ after OMFS would fail to provide benefit to these cases of preterm uterine rupture.

Patients and physicians need to be warned. The legacy of OMFS in subsequent pregnancies is a relatively high risk of preterm uterine rupture and fetal death. ■

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