Bleeding and fetal Doppler parameter

To the Editor,

The report on "bleeding and fetal Doppler parameter" is very interesting (1). Iskender et al. reported that "bleeding during genetic amniocentesis did not change umbilical artery and middle cerebral artery Doppler parameters (1)." The finding might not applicable to all cases. In cases with pathology, an aberration might be possible. For example, in the case with intrauterine growth restriction (IUGR), of which the parameter is usually abnormal (2, 3), the effect should be specifically studied. A similar consideration for the case with polyhydramnios (4) should be mentioned as well.

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Author's Response

We thank the authors for their valuable comments on our study. The main concern raised by the authors is that our findings may not be applicable to all patients, particularly those with obstetrical complications such as intrauterine growth restriction (IUGR) or polyhydramnios. Additionally, the authors suggested that the effects of amniocentesis should be studied specifically under these circumstances. While these suggestions are worthwhile to consider, they seem to miss the point of the present study because of a number of reasons. The sole purpose of this observational study was to investigate whether midtrimester amniocentesis through the transplacental route had any significant effect on fetal hemodynamic parameters (1). To eliminate potential confounders, patients with aneuploidy were excluded. In our cohort, there were no cases of very early IUGR, which is a relatively rare condition with a diverse etiology. The majority of cases are associated with fetal anomalies, aneuploidies, or infections (2). Considering the etiological diversity of very early IUGR, we doubt whether the impact of placental manipulation during amniocentesis in these patients would be of any clinical significance without a proper methodology. A similar consideration is also valid for polyhydramnios, which is related to a higher incidence of associated fetal abnormalities especially when related to IUGR or preterm birth (3).

Having stated that, we would like to mention that we totally agree with the authors who suggested that the effects of amniocentesis should be studied specifically under these circumstances. As suggested by our findings and other studies (1, 4), amniocentesis is a safe procedure with minimal and short-term consequences on fetal hemodynamics. We hope these findings provide a basis for relevant future research.

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