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LETTER TO THE EDITOR

Reply to the letter

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To the Editor:

We are most grateful to Dr. Mazda for the helpful comments on our manuscript [1].

Our study has shown that continuous blood pressure monitoring reduced the incidence of hypotension during cesarean delivery. As Dr. Mazda pointed out, non-invasive continuous blood pressure monitoring is ideal, however, its application should be limited to severe cases such as pregnancy-induced hypertension.

Recent guidelines have recommended the hemodynamic management maintaining blood pressure (BP) more than 90% of baseline systolic BP (SBP) during cesarean delivery [2], therefore, we designed our protocol based on SBP. The mean BP (MBP) may be more important than SBP as a determinant of organ perfusion, and further studies are needed to investigate the impact of the hemodynamic management using MBP during cesarean delivery on the fetal and maternal outcomes.

The longer duration of hypotension was associated with lower umbilical arterial pH. In our study, the duration of hypotension was not assessed. However, the higher frequency of hypotension in the control group would cause the longer duration of hypotension. Unfortunately, our study did not have enough power to show the statistically significant difference in the umbilical arterial pH ($p = 0.056$), which could be revealed by a larger sample size in the future study.

Compliance with ethical standards

Conflict of interest K.S. has received a speaker fee from Edwards LifeSciences.

References

1. Juri T, Suehiro K, Kimura A, Mukai A, Tanaka K, Yamada T, Mori T, Nishikawa K. Impact of non-invasive continuous blood pressure monitoring on maternal hypotension during cesarean delivery: a randomized-controlled study. J Anesth. 2018;32(6):822–30. https://doi.org/10.1007/s00540-018-2560-2.
2. Kinsella SM, Carvalho B, Dyer RA, Fernando R, McDonnell N, Mercier FJ, Palanisamy A, Sia ATH, Van de Velde M, Vercueil A. International consensus statement on the management of hypotension with vasopressors during caesarean section under spinal anaesthesia. Anaesthesia. 2018;73:71–92.

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