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LETTER TO THE EDITOR

Vasopressors in obstetrics: guidelines and good practice

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To the Editor,

We thank Butt and his colleagues for their interest in our study [1]. We would present our response to some of their concerns and invite them to revise the current guidelines which would provide more answers to their comments. The use of systolic blood pressure (SBP) in the definition and management of hypotension is clearly recommended in the guidelines [2, 3]. Therefore, this practice is normal and valid in this kind of research.

Butt et al. criticize the instant management of hypotension and believe that we should repeat the measurement to confirm hypotension; nevertheless, they also assure that hypotension would be hazardous if persisted > 2 min. We manage hypotension instantly using vasopressor as per the current recommendations which encourage prompt management of maternal hypotension to avoid fetal and maternal complications such as nausea and vomiting [2, 3]. It is worth mentioning that there is an uprising approach toward closed-loop automated vasopressor delivery systems, if available, to allow timely interventions to correct maternal hemodynamic events [2].

The authors raised the importance of pre-load and co-load during spinal block. We invite them to revise the current guidelines which favor vasopressors as the mainstay of prophylaxis and management of hypotension over fluid loading [2, 3]. The guidelines also recommend the use of crystalloid co-load and not pre-load as the later one has no value in modern anesthetic practice. Our protocol is in line with the international guidelines which also recommend avoiding excessive perioperative fluids to promote enhanced recovery.

Butt et al. raised another concern about the possible impact of maternal anemia on intraoperative hemodynamics. The presence of anemia is not a risk factor for spinal hypotension in obstetrics [4]. Furthermore, preoperative correction of anemia does not prevent intraoperative complications including hemodynamic instability [5].

The authors also commented on the lack of multivariate analysis in our study. Indeed, the use of multivariate analysis would strengthen the results; however, the use of univariate analysis in a well-performed randomized-controlled trial still can provide unbiased estimates of treatment effect [6]. Thus, our results are valid, and the conclusion can answer the research question; however, we believe that the more the studies performed, the stronger the evidence would be reached.

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Declarations

Conflict of interest None.

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