Author’s response to reviews

Title: Effects of continuous infusion of phenylephrine vs. norepinephrine on parturients and fetuses under LiDCOrapid monitoring: A randomized, double-blind, placebo-controlled study

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Effects of continuous infusion of phenylephrine vs. norepinephrine on parturients and fetuses under LiDCOrapid monitoring: A randomized, double-blind, placebo-controlled study

Reviewer reports:
Reviewer 1: I was pleased to have the opportunity to review the manuscript entitled 'Effects of continuous infusion of phenylephrine vs. norepinephrine on parturients and fetuses under LiDCOrapid monitoring: A randomized, double-blind, placebo-controlled'. The authors have compared the efficacy of phenylephrine and NEP infusions in preventing hypotension after spinal anesthesia for cesarean section; and found phenylephrine a better choice. The topic is not novel but available data are conflicting. As a pro, hemodynamic monitoring using LiDCOrapid sounds interesting. The manuscript is generally well-written with sufficient details. However, it could be summarized with eliminating unnecessary palpable statements in the introduction and discussion sections. In the results section, the data for hemodynamic parameters are confusing and duplication of error bars. Only a summary of important data should be provided in the text. As a minor comment, there are some typographic mistakes in the text and even references. I believe that the manuscript could be valuable for readers after a minor revision.
Reply: Thanks a lot for your pertinent assessment
1. We thank the reviewer for this valuable suggestion. I already reorganize the result part to make it clear, and a summary of important data, especially the data for hemodynamic parameters which may confused the reader.
2. We adjusted the typographic mistakes in the text and even references.

Reviewer 2: GENERAL COMMENTS:
This is a valuable piece of information and useful to a specific readership, but the text needs 'moderate' extensive revisions (all issues are curable, in my opinion).
Reply: Thanks a lot for your pertinent assessment

REQUESTED REVISIONS:
I value the efforts made and the data as reported but do have a list of specific comments to further improve the paper.
Reply: We thank the reviewer for this valuable suggestion. We already revised the sentence one by one.

Abstract:
T4, T5, and T6 are meaningless without reading the full paper, methods. The final sentence of the conclusion part is, in my reading, a too strong statement (especially if you compare with the conclusion of the full paper), while data on complications are not provided in the abstract.
Reply: Thank you very much for your good suggestion. We already rewrite the abstract part.

Introduction:
The second sentence of the introduction reads somewhat bizarre as it suggest that the placental perfusion reduction affect both the parturient and the fetus. I assume that the reduction in peripheral resistance in the maternal circulation is the driver of the maternal effects?
I suggest to add a reference on the phenylephrine practice and reconsider this line on its flow (phenylepinephrine to norepinephrine to phenylepinephrine).
Reply: Thank you very much for your good suggestion. For “the placental perfusion reduction affect both the parturient and the fetus. I assume that the reduction in peripheral resistance in the maternal circulation is the driver of the maternal effects”, we think your comprehend was correct. We already rewrite this part about adding the reference of phenylephrine practice.

Methods
Standard weight, defined as the actual height minus 110 cm? Please explain this.
Reply: Thank you very much for your good suggestion. We defined the standard weight according the reference [30]

Do I understand it correctly that in the case of severe hypotension, vasopressor administrations were open label?
Reply: Thank you very much for your good question. Vasopressor administrations was blinded. The volume prepare the same using same volume syringe.
Maternal complications were collected until?...discharge for monitoring unit, or 24 h, or other?
Reply: Thank you very much for your good question. Maternal complications were collected until discharge from the operation room.

Sample size calculation: was there really an increase of systolic blood pressure in both treated groups in the pilot, or was the blood pressure higher in the treated groups compared to controls?
Reply: Thank you very much for your good question. Sample size calculation based on the pilot study.

Results
Based on the figure, I suggest rephrasing the first sentence, if we agree that recruitment can only be done in those who consented, and this first line can be made much shorter as it is repeating the Table 2 results (+ there was no significant difference among the three groups is repeated in the sentence just before this sentence.

Hemodynamics:
I understood the add-on value of data compared to the figures, but a table will make the message much clearer, in my opinion, and consider the same approach for the blood gas indices (perhaps all info in one big table with subheadings?).
Reply: Thank you very much for your good advise. We rewrite this part, and summarize the add-on value of data and accurate P value in Supplement- table-1 to make the message much clearer. And re-vise the hemodynamic part to make this part easily understand.

Adverse reactions
Control group has higher intraoperative hypotension? I assume that you refer to the incidence and not the 'extent' of the hypotension? Similar comment on tachycardia (incidence > heart rate).
Reply: Thank you very much for your good advise. YES, this was the incidence of hypotension, and revised this part.

Intro should read intra-operative.
Nausea is discussed twice.
Please adapt: difficult breathing, or difficulty in breathing?
Reply: Thank you very much for your good suggestion. We already revised these three points.

Discussion
The SBP maintain stable should perhaps read remained stable
Reply: Thank you very much for your good advise. YES, this was “remained stable”, and revised this part.

The placenta transfer related comments should be reconsidered. Mentioned twice, but contradictory in my reading.
Reply: Thank you very much for your good advise. We already revised this part.