Reviewer’s report

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

Version: 0 Date: 15 Jul 2020

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?
Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?
Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?
Yes - experiments and analyses were performed appropriately

STATISTICS - Is the use of statistics in the manuscript appropriate?
Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?
Yes - the author's interpretation is reasonable

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?
Maybe - with major revisions

PEER REVIEWER COMMENTS:

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).

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.

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.

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).

Methods

Standard weight, defined as the actual height minus 110 cm? Please explain this. Do I understand it correctly that in the case of severe hypotension, vasopressor administrations were open label?

Maternal complications were collected until?...discharge for monitoring unit, or 24 h, or other?

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?

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?).

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). Intro should read intra-operative.
Nausea is discussed twice.
Please adapt: difficult breathing, or difficulty in breathing?

Discussion
The SBP maintain stable should perhaps read remained stable

The placenta transfer related comments should be reconsidered. Mentioned twice, but contradictory in my reading.
I have read the consort check list, no comments.

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No

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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