Author’s response to reviews

Title: Premedication with intranasal dexmedetomidine decreases barbiturate requirement in pediatric patients sedated for magnetic resonance imaging: a retrospective study

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Author’s response to reviews:

BANE-D-18-00500R3 Premedication with intranasal dexmedetomidine decreases barbiturate requirement in pediatric patients sedated for magnetic resonance imaging: a retrospective study

We thank the Editor and the Reviewer for their comments. Here are the comments followed by our responses:

Editor

Your manuscript "Premedication with intranasal dexmedetomidine decreases barbiturate requirement in pediatric patients sedated for magnetic resonance imaging: a retrospective study" (BANE-D-18-00500R3) has been assessed by our reviewers. Based on these reports, and my own assessment as Editor, I am pleased to inform you that it is potentially acceptable for publication in BMC Anesthesiology, once you have carried out some essential revisions suggested by our reviewers.
We request that a point-by-point response letter accompanies your revised manuscript. This letter must provide a detailed response to each reviewer/editorial point raised, describing what amendments have been made to the manuscript text and where these can be found (e.g. Methods section, line 12, page 5). If you disagree with any comments raised, please provide a detailed rebuttal to help explain and justify your decision.

Please also ensure that your revised manuscript conforms to the journal style, which can be found at the Submission Guidelines on the journal homepage.

A decision will be made once we have received your revised manuscript, which we expect by 07 Feb 2019.

Our response:

We thank the Editor for His comments and the possibility to response to the comments. We have responded all comments. After revision, we ensured that the revised manuscript conforms to the journal style.

Reviewer #1

Many thanks for the authors who did a great effort in response to the reviewers comments which improved this article so much, the following are my comments:

Page 17, line 24: the conclusion should be rephrased as during the study the authors did not measure any indicator of the sympathoadrenal response.

Page 17, line 25: the authors stated in page 16 line 7 that there is no significant difference in the time of discharge between both group, how did the authors conclude excellent recovery in the Dex group?
Our response:

We thank the Reviewer for these kind comments and for a careful review of our manuscript.

We agree with the Reviewer that no direct conclusion can be drawn about the sympatholytic effect of intranasal dexmedetomidine dose used in our study, since blood pressure was not routinely measured and catecholamine concentrations were not measured. However, we measured heart rate which has been previously shown to be a good surrogate for sympatholytic effects caused by dexmedetomidine.

Our conclusion about the excellent recovery was based on the observations made during the care of our patients. Since all patients were observed at least two hours after the end of MRI, we cannot draw any conclusion that dexmedetomidine group would be superior to thiopental group in regard of recovery time.

Based on both comments of the reviewer we ended up removing the sentence “It attenuates sympathoadrenal stress responses, does not compromise respiration, and also has an excellent recovery profile after MRI sedation of pediatric patients.” from the Conclusion (page 12, line 24), since the effects of dexmedetomidine on respiration are mentioned later in the Conclusion.