Reviewer's report

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

Version: 1 Date: 25 Nov 2018

Reviewer: Sujith Cherian

Reviewer's report:

- The authors have attempted to do a study to assess the decrease in the dose of Thiopental with the use of intranasal Dexmedetomidine which is very well done overall, and presents a novel yet effective measure to reduce the need for Thiopental which is associated with its own array of complications.

- The primary outcome is statistically significant, and conclusions arrived at are very appropriate and may be significant.

- However, with regards to secondary outcomes- although statistically significant change in O2 supplementation between the groups is present, the indications for supplementation of O2 is not clearly well defined, and if the given median range of O2 saturations are above > 94% in both groups, it is unclear to me why the group not on Dexmedetomidine received so much supplemental oxygen.

- Also, the reason why times varied for duration of MRI should be elaborated on.

- Conclusions are appropriate except for the secondary outcomes.
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.

No

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 recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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