Reviewer’s report

Title: Efficacy of premedication with intranasal dexmedetomidine for removal of inhaled foreign bodies in children by flexible fiberoptic bronchoscopy: a randomized, double-blind, placebo-controlled clinical trial

Version: 1 Date: 15 Sep 2019

Reviewer: Gyaninder Singh

Reviewer's report:

The manuscript is much improved after the revisions based on the reviewers comments.

However, I will like to suggest the following points:

1. Methods:

At 25 min before anesthesia induction, the patients were administered either intranasal dexmedetomidine (20171202; Nhwa Pharmaceutical Co., Ltd., Jiangsu, China) 1mcg·kg⁻¹ (100 μg in 1 ml) or intranasal 144 normal saline 0.01ml·kg⁻¹ (Figure 1).

It will be appropriate to write how the blinding was ensured. Who prepared the drug, who administered it and who made the observation/recordings rather than it was a double blinded study.

Also use 'μg' uniformly throughout instead of μg or mcg in the text.

2. Anesthesia was induced via mask using 5%-8% sevoflurane in 100% oxygen at 6 L·min⁻¹ until the BIS decreased to 40, at which point the LMA was inserted.

Here, the authors describe that the BIS value was 40 in all patients at the time of LMA insertion. However, the mean BIS value at the time of LMA insertion (TLMAi) is higher (55-60) in both groups (Figure 6).

3. The primary outcome measurements were the incidence of adverse events including: oxygen desaturation, CO2 retention, coughing, body movements, bronchospasm, laryngospasm, breath-holding during the procedure, and coughing in the PACU. Oxygen desaturation was defined as Spo2 &lt;90% for 10s. CO2 retention was defined as EtCO2 ≥45 mmHg at the end of the procedure.
Why was CO2 retention considered only at the end of procedure and not during the procedure. (Line 177-178: The HR, RR, SpO2, and BIS were recorded at various time points. This did not mention about EtCO2).

Sample size calculation: It was based on the preliminary study considering reduction in laryngospasm (as complication). Was the sample size calculated considering other complication (coughing, body movements, bronchospasm etc) studied here and whether the sample size required was adequate for other complications as well?

Discussion: Decreased secretion from crying during patients' separation from their parents and anesthesia induction can reduce the incidence of laryngospasm and coughing.

Reframe this sentence as it gives the impression that the secretions are decrease due to crying and anesthesia induction.

Figure legends: Correct the spellings.

Figure 5 and Figure 6: write 'fiberoptic bronchoscopy' instead of giberoptic bronchoscopy.

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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