Reviewer’s report

Title: Determination of the optimal inspiratory pressure providing adequate ventilation while minimizing gastric insufflation using real-time ultrasonography in Chinese children: a prospective, randomized, double-blind study

Version: 0 Date: 25 Apr 2017

Reviewer: Samuel Schechtman

Reviewer's report:

Well designed study highlighting a new technique in use of ultrasound for examining gastric distension/contents. One major concern is that I think there needs to be discussion of actual adverse events that occurred (e.g. aspiration, desaturation events, difficult airway management, cardiovascular hemodynamic instability). And whether the findings are clinically relevant. While the data and findings are interesting there is no discussion as to whether the increase in antral CSA post facemask ventilation in subgroups P14 and P16 increases risk of aspiration events. Clinically is it relevant whether antral CSA is increased - does this actually increase aspiration events? This needs to be addressed as to the clinical importance of this finding. Similarly did the inadequate lung ventilation in the P8 (EtCO2 of 40.8) and P10 groups result in any clinical complications. Again need to address whether having a higher end tidal CO2 after facemask ventilation results in adverse clinical outcome. If not this is more an interesting finding without clinical relevance. And how is it determined that an end tidal CO2 of 40.8 correlates to inadequate ventilation?

Also think a limitation needs to be addressed that "Three patients from group P16 and one patient from Group P14 were excluded from the study,

because the antral CSA could not be measured due to a large air insufflation in the stomach after FMV." Again why would those with large amounts of air insufflation be excluded? Isn't this what the investigation is examining? Please clarify and discuss in limitations (e.g. patients with significant air insufflation that couldn't be quantified were excluded.)

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?
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