Reviewer's report

Title: Supreme™ Laryngeal Mask Airway Use in General Anesthesia for Category 2 and 3 Cesarean Delivery: A Prospective Cohort Study

Version: 0 Date: 10 Jul 2017

Reviewer: Ron George

Reviewer's report:

Thank you for the opportunity to review your manuscript "Supreme laryngeal mask airway use in general anesthesia for category 2 and 3 cesarean delivery: A prospective cohort study". I hope you will find these comments useful in revising your manuscript.

1. Within the abstract and other parts of the manuscript when you discuss the use of the double lumen LMA you suggest it reduces the risk of aspiration. I believe this is not a proven fact and only a potential benefit of this double lumen design so in the abstract where you state "hence reducing the risk of aspiration" please consider less definitive language.

2. Your introduction is very well written and provides readers with an appropriate degree of background literature. Your hypothesis is based on their being "limited evidence of the use of SLMA in more emergent cesarean deliveries" - however I think you need to offer readers an exclamation of why the previous evidence with a high insertion rate success is not applicable to category two and three cesarean deliveries. Given that category two and three deliveries there is no immediate life-threatening emergency I do not necessarily believe your cohort is significantly different then the cohorts already studied.

3. Please recall that all pregnant women are in minimum of ASA 2.

4. Please clarify the flow of patients within this project; I want to better understand how you were able to obtain informed consent from every parturient in the antenatal ward or delivery suite. This is quite an accomplishment and I believe other obstetric anesthesia researchers would like to understand and replicate.

5. How did you define gastro-oesophageal reflux disease within your exclusion criteria.

6. How did you define failure of orogastric tube insertion.

7. Where are the "additional maneuvers" [chin lift, jaw thrust, head extension] allowed to be used during the primary or initial insertion.

8. What sort of instructions were given to your obstetrician to avoid excessive fundal pressure during fetal extraction.
9. On page 6 line 7 you suggest muscle paralysis was reversed, however you only used succinylcholine as described in the methodology. Is this an error or were other muscle relaxants used.

10. I think you should clearly define "consciousness" for when you removed the LMA device.

11. Regarding your recruitment, what is your institutional cesarean delivery rate and how many women were screened and/or recruited but did not have a cesarean delivery.

12. Within the results section, much of the text is simply repeating the data within the tables. You could reduce the amount of text within your results section and use it as an opportunity to highlight the most interesting findings. When adding text to the results section please consider the clinical significance and value added to this section.

13. I think you should consider adding an explanation for why you feel peak airway pressure's and negative seal pressure are clinically relevant to this project and why one would expect them to be different between category two and category three caesarean deliveries.

14. You report the results of pH studies of gastric contents and the surface of the element device, is there any evidence to suggest that this difference is not to be expected and has any clinical relevance.

15. Page 9 line 9 - please correct the sentence "more parturients reported…" As I don't believe the parturients reported this outcome.

16. Page 11 line 16 - please consider revising this paragraph as you seem to contradict yourself in stating that a limitation was that the majority of parturients were not in labour but in the preceding paragraph you suggest that this is a benefit of this project was the number of labouring parturients.

17. Regarding the tables, as I mentioned earlier, the tables should supplement the results section but not be repetitive of all data within the results section. Please take this into account in your revisions.

18. In the table and within the entire manuscript please include effect sizes were possible including 95% confidence interval's if possible. Simply including "significant" P values unjustly implies a significant outcome where in most cases there were no clinically relevant differences.

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.

Not relevant to this manuscript

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

Acceptable

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