Reviewer’s report

Title: LMA Gastro™ Airway is feasible during upper gastrointestinal interventional endoscopic procedures in high risk patients: a single-center observational study

Version: 0 Date: 01 Dec 2019

Reviewer: Gerardo Cortese

Reviewer's report:

Dear Authors,

your paper represents an interesting contribute about use of LMA Gastro, a device still not thoroughly studied in literature.

However I identify some gaps and inaccuracies that, if not corrected and deepened, do not in my opinion allow its publication.

MAJOR CONCERNS

Methods:

A) You should better define the SGD positioning phase with objectiviable data, such as insertion time, insertion attempts, cuff pressure etc. See for example table 2 in "Comparison of laryngeal mask airway insertion methods, including the external larynx lift with pre-inflated cuff, on postoperative pharyngolaryngeal complications. A randomised clinical trial", Ling Qun Hu et al, Eur J Anaesthesiol 2017; 34:448-455.

B) You include 2 patients with respectively BMI 52 and 65. Evidence of safe SGD use as sole device for general anesthesia in super obese patients is actually lacking. Considering that the LMA gastro does not facilitate intubation (See Technical Data Sheet) which would have been your "plan B" strategy in case of failed positioning? How would you manage an asleep super obese patient without a secured airway and with a very probable difficult ventilation and difficult intubation pattern? Please note that "Obesity is found as an independent factor for SGD difficult positioning with a high risk rate of inadequate ventilation, caution is advised" ("Airway management and oxygenation in obese patients", Murphy and Wong, Can J Anesth/J Can Anesth (2013) 60:929-9452013). See also "Perioperative and Periprocedural Airway Management and Respiratory Safety for the Obese Patient: 2016 SIAARTI Consensus", Petrini F. et al, Minerva Anestesiologica, 82 (12), 1314-1335 Dec 2016 and "Safety aspects of desflurane anesthesia and laryngeal mask airway" Rossi M et al, Minerva Anestesiologica 2017 November;83(11):1199-206. Please justify inclusion of such high BMI and support it with existing literature your choice in terms of clinical safety or exclude them.
C) You include POEM patients, a cluster with a strong recommendation for RSI or orotracheal intubation AFTER gastric content evacuation, due to the high risk of regurgitation. Please explain how did you manage (informed consent and patient safety) the position of choosing an airway management technique different from the one strongly recommended by the guidelines you correctly mention in the text (Ref n.22). Other references supporting the risk of aspiration and the need of RSI or preoperative gastric evacuation "Anesthesia in per-oral endoscopic myotomy: A large tertiary care centre experience" Darisetty S et al, Indian J Gastroenterol (July-August 2017) 36(4):305-312. Please justify or support your choice in terms of clinical safety or exclude them.

MINOR CONCERNS

Background:


Page 2 line 12 and page 7 line 13: "...sufficient" airway": not clear meaning. Do you mean protected? Without air loss? The same adjective, not well defined, is used referred to the "placement" on page 3 line 1, referred to the "ventilation" page 10 line 2. Please define better.

Page 4 line 18: "...not altered parameters..." Comparing with which reference values? I mean, which thresholds do you refer to, by saying your parameters are in range?

Page 5 line 6: not clear in the text the correlation between ASA &gt;2 and the need for general anesthesia. Please support with some references.

Page 11 line 1: you should explain if the described damage can be correlated in that patient to a difficult positioning or necessary repositioning of the LMA

Page 12 line 4: "...efforts similar to other second generation SADs...". Too generic. Which are the efforts you refer to? Please support this sentence with objectivable data.

Page 12 line 7: is this warning for possible collateral damage described in the Manufacturer technical sheet? Or in literature? If yes please add references.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Unable to assess

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

Quality of written English
Please indicate the quality of language in the manuscript:
Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal