Author’s response to reviews

Title: Comparison of Videolaryngoscope-guided versus Standard Digital Insertion Techniques of the ProSealTM Laryngeal Mask Airway: A Prospective Randomized Study

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Author’s response to reviews:

We really appreciate all the advice you gave us. The manuscript was re-evaluated and corrected to the best we can. I hope the revised article could still have the intact scientific content. The change which made according to reviewer comments has been colored in the manuscript. And new references has been added. So, alterations and answer of question which belong to our referee as follows comments from the reviewers:

Reviewer reports:

Rita Cataldo, Assistant Professor (Reviewer 2):

Q1. I declare from the beginning and frankly that in my opinion the concept itself of SAD, for its important input to the story of airway management, excludes the laryngoscopy/video techniques. But probably I’m a purist...nevertheless something bothers me.

In effet if we consider a II generation SAD as a possible RESCUE device (see DAS guidelines and more), I have to be able to insert it quickly and without adjunctive devices. Using SAD in routine anesthesia will make me able to handle it skillfully and to insert it in a simply way in case of a difficulty ; I would appreciate a comment on this matter in the paper, maybe in the discussion?
A1. Using SAD in routine anesthesia has been added in the manuscript according your advice. The following sentence was inserted into discussion section:

It was reported that second-generation SADs (i-gel, PLMA, LMA Supreme) have reliable first-time placement, high seal pressure, separation of gastrointestinal and respiratory tracts and are recommended to intubation fail for airway rescue as well by Difficult Airway Society guideline [22]. Successful placement is most likely on the first attempt. Repeated attempts at inserting a SAD increases the probability of airway trauma and may delay the decision to accept failure.

Q2. please read and cite : Sorbello M, Petrini F Turk J Anaesthesiol Reanim. 2017 Apr;45(2):76-82. This paper is just about the concept of positioning and SAD; please comments this topic in light of your paper

A2. The manuscript of Sorbello M et al. has been read and cited in the present study.

The manuscript has been read and cited in the background and discussion section.

“Many studies demonstrated that in cases of failed conventional insertion of SADs, PLMA manufacturer’s introducer, 90° rotational technique, laryngoscope/videolaryngoscope-assisted or catheter-assisted techniques had the high success rate [9]. So, we designed the study to compare with the videolaryngoscope assisted and digital technique.”

Q3. please explain page 4 line 10 "folding over the distal cuff"

A3. The sentence has been reviewed and corrected as following: Downfolded of the epiglottis during device insertion, the distal cuff folded over backwards…

Q4. in my opinion some difficulties during SAD positioning are related and consequence of a light anesthesiological plan with some reflexes still present. Mioresolution can help to obtain the best conditions to introduce a SAD. Do you think that a deeper induction (more then 2 mg/kg of propofol) and/or mioresolution could improve the positioning scores? Please I'd appreciate your considerations about it

A4. The mioresolution (jaw relaxation) is important for the ease of laryngoscopy and SAD positioning. Many studies demonstrated that the doses which used our study provided adequate intubating conditions in the absence of neuromuscular blockade(1,2). The positioning scores which occur with our induction doses obtained the optimal condition to placement the PLMA. Additionally, we used same induction doses in the both group, so we think the our study results did not effect.


Q5. why did you choose a D-Blade instead of a Macintosh one?

A5. It was reported that “The CMAC D-Blade caused less dental pressure than the conventional C-MAC and ML in the cervical immobilization scenario. The D-Blade is half-moon-shaped and can be used with the C-MAC system. This equipment was added to the C-MAC system to increase the potential to manage difficult airways and to introduce an alternative blade that can be used in extremely difficult conditions.”( Kılıçaslan A, Topal A, Erol A, Uzun ST. Comparison of the C-MAC D-Blade, Conventional C-MAC, and Macintosh Laryngoscopes in Simulated Easy and Difficult Airways. Turk J Anaesth Reanim 2014; 42: 182-9).

Additionally we used to perform C-MAC D Blade before beganing the study and we have experience using the blade. Therefore we choose the blade.

Q6. Personally I disagree about your choice to deflate the cuff before PLMA removal; generally remove the LMAs still cuffed consent to remove with them secretions potentially able to trigger reflexes as laryngospasm. Please explain your protocol

A6. Thank you for your accurate comments. It was not correctly present the process of removal the PLMA because we are not native speaker. In our study the process of removal the PLMA was following and corrected in the manuscript.

"At the end of the operation, the PLMA was removed when patients were able to sufficient spontaneous respiration and obey comments."

Q7. I find using "recommended" for fiberoptic assessment of LMA placement is a bit too strong. What is your opinion?

A7. It is really the sentence is a strong expression. It has been changed as follow: Laryngeal mask airway placement can assesed using fibreoptic laryngoscopy

Q8. I think the Paper message could be that Videolaryngoscopy can be a help in case of difficult positioning of a PLMA and can improve the LMA performance in some circumstances, but digital insertion remains more easy, time saving, less expensive, be used everywhere, with training and educational value.
A8. We changed our conclusion sentence as follows in accordance with your advice:

The standard digital insertion technique has successful insertion rate with easy, time saving, cheap, be used everywhere and simple training. Videolaryngoscope-guided insertion technique can be a help in case of difficult positioning of a PLMA and can improve the PLMA performance in some conditions. We suggest that the videolaryngoscope-guided technique may be a useful technique if the digital technique fails.

Ida Di Giacinto (Reviewer 3):

Q1. Background

About positioning of SAD, please read, cite and comment Sorbello M, Petrini F. Supraglottic Airway Devices: the Search for the Best Insertion Technique or the Time to Change Our Point of View?. Turk J Anaesthesiol Reanim. 2017;45(2):76-82.

A1. The manuscript has been read and cited in the background section.

Q2. Methods

Page 6, line, line 19: you cite "neuromuscular blocking agent". Please explain the choice of NMBA and discuss it. I think that it is the correct choice to insert SAD and I am agree, but you should discuss this argument.

A2. We think there is misunderstanding about neuromuscular blocking agent. “All patients underwent a standard general anesthesia technique without the use of neuromuscular blocking agent after 3 min of preoxygenation with a face mask.”

Many previous studies which we cited in the present study were not prefer the neuromuscular agent. Therefore, we did not use neuromuscular agent.