**Line-by-line Response Letter (Revision of Version 5516\_R1\_070516)**

Manuscript JoVE55116R1 “Topical airway anesthesia for awake endoscopic intubation using the spray-as-you-go technique with high oxygen flow.

Version 55116\_R1\_070516

**Editorial comments:**

* Please keep the editorial comments from your previous revisions in mind as you revise your manuscript to address peer review comments. For instance, if formatting or other changes were made, commercial language was removed, etc., please maintain these overall manuscript changes.
* **Formatting:**
* Please define all abbreviations at first occurrence (ie ECG, IQR etc.).

All abbreviations are now defined at first occurrence.

* Table 1 should have a title in the legends.

We included a title to the legends.

* References – Please include DOI where available.

We included DOI where it was available.

* Please copyedit the manuscript for awkward English and correct use of punctuation. Such editing is required prior to acceptance, and is recommended to be performed by a native English speaker.

We submitted the document to Proof-Reading-Servive.com for editing and proofreading. Please find attached the certificate (Certificate\_201608-19131029.pdf).

* **Some specific examples are indicated below:**
* Line 49 – “insufflation; organ rupture” – wrong punctuation.

; changed into ,

* Line 75 – “On the assumption that a flow of 10 l/min atomizes the local agent in finer particles evoking even less coughs we tested successfully the atomizer” – awkward phrasing

Thank you for pointing this out! We now reworded the sentence.

* Please use “their” rather than “his” or “her”.

We corrected the manuscript accordingly.

* 3.2 – “Apply lidocaine 10% spray twice directly”

“his” changed into “the”

* 5.2 – “Oxygen flow meters with humidifier bottles most not are used.”

Was changed to “Oxygen flow meters with humidifier bottles must not be used”.

* 5.5 note – “is a suitable anesthetic effect” – effect is not the correct word.

Is now changed to “efficacy profile”

* Line 172 – “except of one”

Changed to “except one”

* Please use American English throughout. For example, “randomised" should be “randomized”, and “visualisation" should be “visualization”.
* **Additional detail is required**:
* 2.3 Please clarify. Where is the placement?

We now are more specific: peripheral.

* 4.2 – Please clarify “rescue” treatment. When would this be used?

… until a Ramsay Sedation Score of 2 (cooperative, oriented, tranquil) is achieved.

* 6.2 – Is the anesthetic injected or sprayed? Is the atomizer used or is it

injected with a needle?

We used the Atomizer

* **Discussion:**
  + Please discuss the critical steps of the protocol.
  + The discussion ends awkwardly. Please end on discussion of the future applications of the method.

• If your figures and tables are original and not published previously, please ignore this comment. For figures and tables that have been published before, please include phrases such as “Re-print with permission from (reference#)” or “Modified from..” etc. And please send a copy of the re-print permission for JoVE’s record keeping purposes.

Figures and tables have not been published previously.

• JoVE reference format requires that the DOIs are included, when available, for all references listed in the article. This is helpful for readers to locate the included references and obtain more information. Please note that often DOIs are not listed with PubMed abstracts and as such, may not be properly included when citing directly from PubMed. In these cases, please manually include DOIs in reference information.

We now included available DOIs.

• IMPORTANT: Please copy-edit the entire manuscript for any grammatical errors you may find. The text should be in American-English only. This editing should be performed by a native English speaker (or professional copyediting services) and is essential for clarity of the protocol and the manuscript. Please thoroughly review the language and grammar prior to resubmission. Your JoVE editor will not copy-edit your manuscript and any errors in your submitted revision may be present in the published version.

We submitted the document to Proof-Reading-Servive.com for editing and proofreading. Please find attached the certificate (Certificate\_201608-19131029.pdf).

• NOTE: Please include a line-by-line response letter to the editorial and reviewer comments along with the resubmission.

**Reviewers' comments:**

**Reviewer #1:** *Manuscript Summary:* In this manuscript a technique is described for the administration of local anesthetics. The use of Enk Fiberoptic Atomizer Set(TM) with high flow oxygen results with advantages including less coughing and gaging reflex and high patient satisfaction.  *Major Concerns:* During awake intubation we commonly use spray as to go technique and classical bolus administration for the application of local anesthetics. When compared with the spray-as-you-go technique, the atomizer technique has better results including fewer coughing episodes. Besides this technique is quicker and results in less lidocaine administration with higher patient comfort. I think this manuscript is quite important because it gives valuable information about an alternative method of lidocaine administration during awake fiberoptic intubation. I recommend acceptance for this article.  *Minor Concerns:* N/A  *Additional Comments to Authors:* N/A

**Reviewer #2:** *Manuscript Summary:* N/A  *Major Concerns:* It is a well designed study but I have my doubts that the high flow of oxygen as recommended by the authors would add to dispersing mucus secretions and blood thus providing a better view. Such a high flow could well be an impediment in the better visualization of the glottis. Moreover, I am not convinced that it would be of help in curtailing the coughs. The authors are advised to provide an explanation if possible in the Discussion section to allay our apprehension in this regard.  *Minor Concerns:* N/A  *Additional Comments to Authors:* N/A

Thank you very much for your valuable comment. When we initially used this techniques we were surprised how effective this technique was in some patients. Our observations led to our study hypothesis. We would like to encourage the reviewer to read the original article which includes all the data of our trial (Pirlich, N., Lohse, J.A., Schmidtmann, I., Didion, N., Piepho, T., & Noppens, R.R. A comparison of the atomizer with boluses of topical anaesthesia for awake fibreoptic intubation. *Anaesthesia* **71**, 814-822, doi: 10.1111/anae. 13496 (2016).