

January 15, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 14915-review.doc).

**Title:** *EFFICACY OF DIFFERENT DOSES OF SUGAMMADEX AFTER CONTINUOUS INFUSION OF ROCURONIUM*

**Author:** Diego Soto Mesa, Mounir Fayad Fayad, Laura Pérez Arviza, Verónica Del Valle Ruiz, Fernando Cosío Carreño, Luis Arguelles Tamargo, Manuel Amorín Díaz, Sergio Fernández Pello-Montes.

**Name of Journal:** *World Journal of Clinical Cases*

**ESPS Manuscript NO:** 14915

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

REVIEWER 00506103:

- ✓ *"However, you should explicate the choice of the dose because a dose of 4 mg are recommended after a deep neuromuscular block and a dose of 2 mg after two responses. The hypothesis should be reported in the introduction. In fact it has been demonstrated that a dose of 4 mg is effective after continuous infusion of rocuronium after the spontaneous recovery of first twitch (T1). A dose - response curve might be more appropriate. ( Rex C, Wagner S, Spies C, Scholz J, Rietbergen H, Heeringa M, Wulf H. Anesthesiology. 2009;111:30-5.)"*

It has been modified.

- ✓ *"In particular the authors should better explain the choice of number of patients and if a reduction of few seconds is really clinically relevant specially with regard a TOF ratio of 0.9. I suppose that a lower TOF ratio has little or no relevance"*

In the text: "The sample size was calculated on the basis of data for previous recovery time from NMB to first response in the TOF after sevoflurane anesthesia followed by 4 mg kg<sup>-1</sup> sugammadex<sup>14</sup>. A 50% increase in recovery time was considered to be clinically relevant. To obtain statistically significant results with a probability of type I error ( $\alpha = 0.05$ ), probability of type II error ( $\beta = 0.10$ ), and a statistical power of 90%, a total of 22 patients were required. Therefore, 32 patients were recruited to compensate for any possible losses"

- ✓ *"Pag 11 the authors should specify Pillay's trace and bibliography of Mauchy's test"*

It has been added.

- ✓ *"Discussion. The authors should stress the utility and safety of 2 mg of sugammadex instead and outline the absence of re-curarization after this dosage if a TOF ratio of 0.9 is safety or a higher dose could be safer to obtain a TOF ratio of 1"*

A TOF ratio  $\geq 0.9$  is the ideal level for reversal neuromuscular block. In the text: "A TOF ratio  $\geq 0.9$  was used as the main desirable objective variable, because a postoperative residual curarization TOF ratio  $< 0.9$  is associated with increased morbidity and extended stay in the post-anesthesia care room". A TOF ratio 1 isn't the ideal desirable objective.

REVIEWER 00506051:

- ✓ *"A conflict of interest exists, since translation of the manuscript was paid by the manufacturer of the sugammadex"*

It has been added.

REVIEWER 00506098:

- ✓ *"English language needs minor editing"*

It has been modified.

REVIEWER 00526025:

- ✓ *"There are six paragraphs in "Introduction." I think six paragraphs for introduction are too many. I would recommend to combine paragraphs 1 and 5 into the first paragraph"*

I decreased the number of paragraphs

- ✓ *"I would recommend that "Materials and Methods" be just "Methods" or "Patients and Methods"*

It has been modified.

- ✓ *" When did you stop giving sevoflurane during anesthesia and surgery?"*

It has been added.

- ✓ *"Page 9 Line 8: I think FiO<sub>2</sub> should be FIO<sub>2</sub>"*

It has been modified.

- ✓ *"Results I think figures should be rounded to the first decimal place"*

It has been modified.

- ✓ *"Page 12 Third paragraph, line 4: I cannot understand "A y 110"*

It has been modified.

- ✓ *"Line 6 from the bottom: In the text, the author write 87.5, which is 82.5 in the table. Which is correct?"*

82.5 is truth

- ✓ *Figure 1b) Mean arterial pressure is written along the vertical line. However, legend for Figure 1b) indicates it*

*is "diastolic blood pressure." I think vertical line seems "mean arterial pressure."*

It has been modified.

- ✓ *"Adverse events should be shown in table"*

It has been modified.

- ✓ *"Discussion I recommend the authors clearly state their new finding(s). The authors write that "4 mg/kg of sugammadex was effective for the recovery of NMB induced by a continuous infusion of rocuronium in patients who kept anaesthetized with sevoflurane. Likewise, we have found that a dose of 2mg/kg of sugammadex can also be effective." The authors should state their definition of "effective." I think their result can be interpreted that 2mg/kg of sugammadex is enough to antagonize continuous infusion of rocuronium. Is this correct?"*

Yes, it has been modified.

3 References and type setting were corrected

Thank you again for publishing our manuscript in the *World Journal of Clinical Cases*.

Sincerely yours,

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