Reviewer's report

Title: Usefulness of intra-operative neuromuscular blockade monitoring and reversal agents for postoperative residual neuromuscular blockade: a retrospective observational study

Version: 0  Date: 11 Jun 2019

Reviewer: Réka Nemes

Reviewer's report:

This study is retrospective analysis of neuromuscular monitoring and reversal habits in a tertiary referral university hospital.

The results of the study are alarming and draw the attention to the personal responsibility of anesthesia care providers to prevent RNMB. In this respect, the reviewer would like the highlight a recently published article by Naguib et al that elaborate on the role of human factor in neuromuscular blockade management [Anesthesiologists' Overconfidence in Their Perceived Knowledge of Neuromuscular Monitoring and Its Relevance to All Aspects of Medical Practice: An International Survey. Naguib M, Brull SJ, Hunter JM, Kopman AF, Fülesdi B, Johnson KB, Arkes HR. Anesth Analg. 2018 Aug 22.]

General questions to the authors:

- Was the dose of neostigmine fixed or adjusted to level of block?
- Do the authors have any information on how was the reversal chosen?
- What kept people from transferring data to anesthesia records?
- Was hand adapter used intraoperatively or postoperatively?
- Did the audit have any consequences with regard to neuromuscular monitoring and reversal practices?
P4L6-8 - Please rephrase the first sentence, it's confusing.

P4L52 - What do the authors mean by "measurements of TOFR in real time" - this is not a definition of quantitative neuromuscular monitoring

P5L1 - The sentence correctly: Several reports suggest that clinical evaluation and qualitative neuromuscular monitoring are not sensitive enough…

P5L30 - The authors here state that the estimated incidence of RNMB is 20-30%. However, the sample size calculation was based on an incidence of 45% (P8L28). Please clarify.

P8L13 - Please omit the word "used"

P8L18 - What did the authors do if TOF counts were delivered?

P8L25-38 - sample size calculation should go to statistical analysis section

P10L37-43 - Did this patient receive reversal?

P10L49-50 - Please change word order: Intraoperative quantitative NMB monitoring

P10L54-55 - Did the authors examine the association between RNMB and the type of surgery or monitoring /reversal habits and the anesthesiologists?

P11L50-53 - "A longer timesince the last administration of NMBD and the time to TOFR in the PACU…" Please rephrase this sentence

P12L23-48 - I would move this passage to the limitations of the study section

P15L35-43 - How big was the variability of the TOFR triplets obtained postoperatively in this study?

P15L47-57 - This passage does not belong to the article.
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.

Unable to assess

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.

I recommend additional statistical review

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

Needs some language corrections before being published

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