Reviewers report

Title: False elevation in Entropy but not in PSI during general anesthesia: A case report

Version: 0 Date: 17 Dec 2017

Reviewer: Stefano Romagnoli

Reviewers report:

Thank you for the opportunity to review the paper by Young Sung Kim and co-workers. I have read the manuscript with great interest. Please find below my comments and suggestions:

Abstract:
- Despite adequate anesthesia, entropy made the two kinds of wrong decisions. The first was due to the effect of EMG and the second was misleading due to the hammer during surgery.
- How can the author state that anesthesia level was "adequate"? How can the author state that the hammer caused SE abnormal increase? The author are probably right but I suggest them blunting the statement.
- Hemodynamic instability should be included among the side effects of too deep anesthesia level.
- "named Root in Korea" … please delete "in Korea"
- "Root is a complex monitoring" .. please replace "complex" with "multi-parametric"
- Please delete the following "in their 2016's official brochure (SedLine ver 2.1 vs 2.0)."
- Replace the term "old" with "previous".
- I would like to suggest the authors to replace the term "FALSE" with "UNUSUAL OR ABNORMAL". You could use "FALSE" just in the discussion.
- Provide information about: informed consent to publish the case and Ethical Committee authorization.
"EEG monitoring techniques have markedly evolved since 1996.". A REF is necessary to support the statement.

One MAJOR aspect that should be considered and included in the discussion is the following:

- Whether the operators learn to "read" the EEG trace, similarly as they commonly do with EKG trace, the probability to be deviated by the NUMBER (pEEG) is less likelihood.

Finally, English should be improved. If the authors are to resubmit this manuscript, it should be reviewed by someone who is well versed in the English language.

**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.

Yes

**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.

Not relevant to this manuscript

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

Needs some language corrections before being published

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