

July 23, 2018

Gerhard Litscher, MSc, PhD, Doctor, Professor

Editor in Chief: The World Journal of Methodology

**Manuscript N: 40549**

**Column:** Minireviews

**Title:** Towards a better understanding of anesthesia emergence mechanisms. Research and clinical implications

**Authors:** Marco Cascella, Sabrina Bimonte and Maria Rosaria Muzio

Dear Professor Gerhard Litscher:

Thank you very much for reviewing our manuscript. We also greatly appreciate the reviewers for their complimentary comments and suggestions. We have carried out the amendments that the reviewers suggested and revised the manuscript accordingly.

Please see below a point-by-point response to reviewer's concerns. We hope that you find our responses satisfactory and that the manuscript is now acceptable for publication.

All of the revisions that we made to the revised manuscript have been cited in the response letter and highlighted in the updated version of the manuscript.

I declare that the manuscript has been revised by a native speaker, Professor Nagoth Joseph Amruthraj. He is a senior researcher at the University of Study of Campania "Luigi Vanvitelli", 81100 Caserta, Italy. Moreover, I reported his help in the acknowledgment section.

Sincerely,

Marco Cascella, M.D. , Professor

Department of Anesthesia and Pain Medicine

Istituto Nazionale Tumori Fondazione Pascale

Naples, Italy

Email: m.cascella@istitutotumori.na.it

Reviewer's code: 00068723

*The authors reviewed literatures on anesthesia emergence (AE). Topics ranged from physiological aspects to clinical implications. Aim and conclusion were not clear. In Introduction, problems of AE were not clear. Possibly, this part would consist of the aim of this review. EEG was interesting, but its implication was immature. It would be better to present clinical features of each EEG findings. Were there any correlation between EEG findings and anesthetic agents?*

**Response:** Thank you. On the basis of your suggestions, we have now revised the abstract and the text. More details on anesthesia emergence problems (e.g., emergence delirium/agitation in children) have been addressed. Furthermore, discussion on correlation between EEG findings and anesthetic agents has been included.

Reviewer's code: 02510721

*To Authors The study shows the developments of the complex neurobiological process of the anesthesia emergence mechanisms. The Authors report in each section, as neurobiology of emergence, translational data and research perspectives, wide discussion based on update references. The manuscript can be very interesting in the perspective of the update of of the anesthetists and surgeons.*

**Response:** thank you for your words of appreciation.

Reviewer's code: 02520738

*To: Editorial Board World Journal of Methodology Title: "Towards a better understanding of anesthesia emergence mechanisms. Research and clinical implications" Dear Editor, I read this manuscript and I think that the paper is good and well written.*

**Response:** thank you for your words of appreciation.

Reviewer's code: 02520845

*ESPS Manuscript NO: 40549 Title: Towards a better understanding of anesthesia emergence mechanisms. Research and clinical implications General comments This minireview provides a current knowledge on the mechanisms of anesthesia emergence including the results of preclinical investigations and gives the translational suggestions and research perspective. The authors systematically described the neurobiology of emergence following by clinical implications and finishing with the translational data and research perspectives. The text is easy to follow as well as readable with interesting writing style which will attract the scientific readers. In literature review, recent researches are listed to this topic. In conclusion, this is a very interesting review which will help to shape our understanding of the anesthesia emergence.*

**Response:** thank you for your words of appreciation.

Reviewer's code: 02519158

*This article is an interesting review concerning modern anesthesia question in clinical practice. It may be a valuable search of knowledge for anesthesiologists, medicine students and for all clinicians who in their practice meet problems of anethesia. For these reasons, I recommend this article for publication in World Journal of Methodology.*

**Response:** thank you for your words of appreciation.