Reviewer’s report

Title: Ultrasound Measurements versus Invasive Intracranial Pressure Measurement Method in Patients with Brain Injury: A Retrospective Study

Version: 0 Date: 21 May 2019

Reviewer: Zhongzhen Su

Reviewer's report:

In this manuscript, the authors compared the accuracy of diagnostic parameters of ultrasound measurements in patients with brain injury underwent invasive intracranial pressure measurement method. Overall, the study is interesting and authors planned the experiments properly. Exploration of the apoptosis associated mechanism is one important part of this article. The authors make their point. However, the following issues must be addressed:

Question 1: The paper focused on the ultrasound measurement of Straight sinus flow velocities, middle cerebral artery flow velocities, and optic nerve sheath Diameter. However, throughout the whole paper, there were no related figure and It's difficult to understand how to measure related parameters.

Question 2: For ultrasound measurements, it's necessary to evaluate the intra-rater agreement. However, there were no related data in the article.

Question 3: One of the exclusion criteria is "inaccessible ultrasound windows", but there was no criteria about "accessible ultrasound windows". It will be better to state it clearly.

Question 4: It's inappropriate to list the result like "(r = 0.8717, p < 0.0001)" in part discussion.

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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