Reviewer’s report

Title: Futile Reperfusion and Predicted Therapeutic Benefits after Successful Endovascular Treatment According to Initial Stroke Severity

Version: 0 Date: 19 Mar 2018

Reviewer: Sung-Chun Tang

Reviewer's report:

Thanks for giving me the chance to review this article. This study used data from a prospective multi-centers IA registration to show the role of NIHSS on futile reperfusion. The result showed that the percentage of futile reperfusion higher in patients with high NIHSS than those with low NIHSS. However, the therapeutic benefit is also higher in those with high NIHSS than those with low.

Overall speaking, the study is well designed and the presented result is clear. However, I have several concerns for the study.

First, the study didn't mention the data of pre-IA imaging, such as score of ASPECTS. It would be important to see any other parameter to determine the occurrence of futile reperfusion, not only high NIHSS and old age.

Second, the study didn't show the data of post-IA hemorrhage or acute brain edema. Theoretically, futile reperfusion may also increase the rate of hemorrhage and enhance the severity of brain edema.

Third, is there any difference between right and left hemisphere stroke on futile reperfusion? Please include this parameter into analysis.

Forth, since the age is an independent factor for the futile reperfusion. You may to age stratification to see any difference between old and young age on the effect of NIHSS on futile reperfusion, such as >80, < 80 years.

Fifth, please directly label the figure 2 a and b as successful and whole groups.
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:

Acceptable

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