Reviewer’s report

Title: Etiology of Isolated Pontine Infarctions: A Study Based on High-Resolution MRI and Brain Small Vessel Disease scores

Version: 0 Date: 23 Aug 2017

Reviewer: Benjamin Tan

Reviewer's report:

This interesting study adds to the existing literature on the aetiologies of isolated pontine infarction with use of HR-MRI. A few comments:

1. The language of the manuscript needs to be checked thoroughly - there are numerous grammatical errors or problems with phrasing which need to be rectified before publication.

   e.g. "Undoubtedly, these would provide an important guarantee for the conclusion."

2. The authors mentioned in their methodology that subjects with pontine infarction possibly caused by cardiac embolism were excluded - how were these cases identified?

3. Was the functional status / mRS identified in the subjects?

4. The authors should discuss how understanding the aetiology of pontine infarction would alter or guide their further management

5. Table 4 - Abbreviation: SVD=small artery disease. Should be small vessel disease.

6. The authors should consider evaluating the sensitivity, specificity and AUC of SVD score in predicting SDPI at an optimal cut-off.

7. I note that the authors found no statistical difference in prevalence of hypertension between patients with PPI and SDPI. Was there increase prevalence of hypertension in patients with high SVD score/burden? (as found in Vemmos KN, Spengos K, Tsivgoulis G, Manios E, Zis V, Vasilopoulos D. Aetiopathogenesis and long-term outcome of isolated pontine infarcts. Journal of neurology. 2005 Feb 1;252(2):212-7.)

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.

No

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 am able to assess the statistics

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

Not suitable for publication unless extensively edited

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