Reviewer’s report

Title: Brainstem infarcts predict REM sleep behavior disorder in acute ischemic stroke

Version: 2
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Reviewer: Naoko Tachibana

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Major Compulsory Revisions

1) Figure 1 does not seem to convey the procedure to select participants. In the last three lines of Participants section, the patients who showed no acute infarct or more than one acute infarct in MRI is defined as the 8th group of the exclusion criteria. Why were they assessed at 3-month poststroke in Figure 1?

2) In Table 1, if the authors really excluded the patients with no acute or more than one acute infarct, the total number of patients who were classified by the location of acute infarcts (i.e. Frontal, Temporal, Parietal,) should match either 13 (patients with RBD) or 106 (patients without RBD). However, when calculated from the last 12 lines in Table 1, they are 19 (for RBD) and 137 (for Non-RBD).

Considering the above two incoherent points, I wonder whether there may be any missing explanation in the Method.

3) Another problem is that the usage of 13-item RBDQ (RBDQ-HK) in a prospective study. As this questionnaire items include both lifetime items and recent 1-year frequency (Did it happen in the recent 1-year?) ones. As the evaluation of RBD by using this questionnaire was performed 3 months after the acute ischemic stroke events, eventually some patients who had already had RBD BEFORE the events may have been included. Therefore, at least, the authors should mention this drawback about using RBDQ-HK, and, if possible, they approach RBD patients (the number is 13, so seems to be not too difficult) to check when the onset of RBD symptoms. According to this procedure, methodology section should be rewritten, but if the onset was really AFTER the stroke events in the majority of the patients with brainstem lesions, this information would strengthen this paper.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests