Reviewer’s report

Title: Identification of VPS35 p.D620N mutation-related Parkinson's disease in a Taiwanese family with successful bilateral subthalamic nucleus deep brain stimulation: a case report and literature review

Version: 0 Date: 14 Aug 2017

Reviewer: Katsuo Kimura

Reviewer's report:

This paper is a first case report of the VPS35 mutation-related Parkinson's Disease case from Taiwan, also first report which was underwent STN DBS from Asian region. In the manuscript, the possibilities those VPS35 mutations are less in Asia, and the effect of STN DBS is high are mentioned. However, much of the content concerning about STN DBS is similar to the previous report, Fleury et al.(14) cited by the authors. In order to improve this manuscript, please consider the following points.

1. Did you measure intraoperative MERs for detecting STN and electrode implantation?
   If yes, were there any changes in STN activity compared to sporadic PD cases? Please note this point. I believe this information is useful for readers.

2. If you have any Brain CT scan or MR images taken after DBS implantation, please present key image as a figure.

3. The authors presented long term follow up after STN DBS, however the outcome is similar previous report by Fleury et al.(14) The authors described that PD patients with genetical back ground seemed to receive much benefit from DBS as patients without genetical background. It is very interesting points. If possible, make another table containing comparison between three VPS35 mutant cases such as Taiwanese case, two Fleury's cases, and idiopathic PD cases such as STN DBS follow up studies, and discuss comparison. If LEDD reduction rate, UPDRS-III reduction rate was larger in VPS35 cases, it is a strong point to confirm authors' opinion.

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.

Not relevant to this manuscript

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

Acceptable

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