Reviewer’s report

Title: Longitudinal brain morphology in anti-NMDA receptor encephalitis: A case report with controls

Version: 1 Date: 27 Dec 2018

Reviewer: Tüzün Erdem

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The presented case demonstrates that in a NMDAR encephalitis case with a relatively favorable outcome and no relapse, minor permanent neuronal loss may occur emphasizing the importance of early diagnosis and treatment. This is an interesting and novel observation and the case presentation fills a gap in the field of autoimmune encephalitis.

Authors would probably have done a better job if they had shown the progress of volume alterations in multiple brain regions by performing measurements of several successive MRIs between baseline and 9 months. In that case they could also provide absolute values rather than percent change values.

The statement "Extrapyramidal and motor symptoms continued to worsen nevertheless" sounds vague since before this statement there is no mentioning of baseline neurological examination and somatic neurological problems of the patient. This information should be provided.

What does joint stiffness precisely refer to? Rigidity?, parkinsonism? Or something else?

I would consider including modified Rankin scores at admission, discharge and at the time of worst neurological symptoms (maximum mRS).

Could ECT, rather than autoimmune encephalitis, have caused late onset neuronal loss? Please discuss this possibility.

Please type methylprednisolon as "methylprednisolone"

In the abstract atypical should be typed as "a typical"

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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