Reviewer’s report

Title: “Neuromyelitis optica spectrum disorder with massive basal ganglia involvement: a case report”

Version: 0 Date: 29 Oct 2019

Reviewer: Sara Mariotto

Reviewer's report:

The authors here report clinical, radiological, and neuropathological findings in a patient with NMOSD related to AQP4-Abs. The description of neuropathological findings in this condition is of utmost importance and has relevant implication for a better understanding of its pathogenesis.

Comments:

* Abstract:
  - The term antibodies to AQP4 should be used (here and through the main text).
  - "Who" has to be avoided in the first sentence of the clinical presentation.

* Background:
  - The term "NMO" should be avoided, according to the recent criteria of NMOSD (Wingerchuk et al. Neurology 2015).
  - In addition, AQP4-Abs are not always present, and this should also be clarified.

* Case presentation:
  - Treatment choices should be better explained (i.e. the choices to do not administer long-term immunosuppressants other than steroids after AQP4-Abs positive result).
  - In addition, the patient should have received a diagnosis of NMOSD also in absence of AQP4-Abs due to her clinical history so the sentence "she was diagnosed as having NMO based on the positive serum AQP4 antibody" is not completely correct.
  - Could aspergillosis of the lung have a role? This should be clarified. The described lesion is necrotic, which is quite atypical in NMOSD, so specific staining (i.e. methenamine silver stain) to exclude fungal infection should be performed.

* References:
  A homogeneous style has to be adopted.

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.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
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Yes
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Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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