Reviewer's report

Title: Nitrous oxide induced subacute combined degeneration with longitudinally extensive myelopathy with inverted V-sign on spinal MRI: a case report and literature review

Version: 0 Date: 08 Jul 2017

Reviewer: Falk Mancke

Reviewer's report:

- Did the authors measure methylmalonic acid, antibodies against parietal cells, intrinsic factor and conduct a esophagogastroendoscopy to substantiate their diagnosis?

- Did the authors exclude other sources for the cognitive decline, e.g. did they conduct a thorough neuropsychological/psychiatric examination or did they conduct a cranial MRI. The authors should report the deficit areas of the MMSE

- The authors should add the MRIs from the follow up to show the amelioration of the hyperintensities

- The quality of the figures is inadequate, e.g. in the sagittal plane the alterations are hardly visible: a higher resolution and a smaller field of view are required and the height of the axial planes should be marked

- Finally, N20 toxicity has been extensively reported and not only by a "few cases" as stated in the manuscript. The uniqueness of this case remains limited, the authors need to work this better out. For instance, by better explaining a connection between N20 and the cognitive decline.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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?
If not, please explain in your comments to the authors.

No

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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