Reviewer’s report

Title: Mitochondrial neurogastrointestinal encephalopathy as a mimic of Crohn's disease: a case report

Version: 2 Date: 06 Nov 2018

Reviewer: Holm Uhlig

Reviewer’s report:

This is short and concise presentation of 2 patients with Crohn's disease and Mitochondrial neurogastrointestinal encephalopathy (MNGIE) an autosomal recessive disorder.

The report is well written and informative since it affects the diagnosis of Crohn's disease in a rare Mendelian disorder and potentially the response to azathioprin. It adds to the current literature in particular Garone et al. Brain. 2011.

In addition to the case report, that authors searched the UK IBD Genetics Consortium dataset of 2513 patients with Crohn's disease for MNGIE variants.

This is an important strategy but the authors need to provide a proper analysis since the sequencing performed in the Luo et al. Nat Genetics 2017 paper was not designed to detect ultrarare variants - what is the coverage of the gene sequencing in this region? What is the power to detect one heterozygous mutation with the available coverage and the call algorithm used? What is the power to detect two heterozygous mutations? Is this sufficient to exclude variants?

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.
I recommend additional statistical review

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