Reviewer’s report

Title: A Chinese pedigree with Brown-Vialetto-Van Laere Syndrome due to two novel mutations of SLC52A2: clinical course and response to Riboflavin

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Reviewer: BALASUBRAMANIEM ASHOK KUMAR

Reviewer's report:

This manuscript presents a case report from Chinese ethnicity with BVVL syndrome, a rare neurological disorder, where two novel mutations such as c.1328G>A (p.Cys443Tyr), and c.1022_1023insC (p.Leu341Profs*103) have been diagnosed in compound heterozygous state in the brain specific SLC52A2. In addition, the study has recorded remarkable recovery of the proband with respect to most of disease associated symptoms except hearing loss upon riboflavin supplementation, which necessitates the need of riboflavin supplementation. Overall the manuscript is written well, while it requires some minor changes. Thereby, I recommend revising this manuscript with minor changes before its acceptance for publication.

Minor Comments:

1. Breath holding spells (BHS) has been recorded in the present case as one among the disease associated symptom. Authors have highlighted in the discussion part that BHS was not diagnosed in any of the BVVLS cases earlier and diagnosed first in this study. In fact, this is not correct. Nimmo et al., 2018 (Am J Med Genet. 2018; 176A:399-403) has already reported BHS in a patient, where a clinical mutation was detected in the same brain specific riboflavin transporter SLC52A2 (c.917G>A; p. Gly306Glu). Thus, authors may revise this manuscript accordingly by citing the above.

2. Authors are asked to check grammatical errors throughout the manuscript.
   For ex.: The Missense variant (c.1328G>A,p.Cys443Tyr) is predicted to be functional damage by several bioinformatics software,…
   Please rewrite this sentence.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Unable to assess

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.

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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