Reviewer’s report

Title: Novel variants in a patient with late-onset hyperprolinemia type II: diagnostic key for status epilepticus and lactic acidosis

Version: 0 Date: 11 Nov 2019

Reviewer: Saadet Andrews

Reviewer's report:

Reviewer comments

Title: A case report: Novel mutations in a late-onset hyperprolinemia type II: diagnostic key by status epilepticus and lactic acidosis

Journal: BMC Neurology

Manuscript number: NURL-D-19-00715

Manuscript type: Case Report

Authors: Motte J. et al.

Motte et al report an adult case with hyperprolinemia type II who presented with refractory seizures and treated successfully with pyridoxine.

Abstract

1. Pyridoxine dependent epilepsy refers to genetic disorders including ALDH7A1, PNPO and PLPBP deficiencies. Authors should use "disorders of vitamin B6 metabolism". This should be applied throughout the manuscript.
2. "mutation" is an old terminology and should be replaced with "Variant" throughout the manuscript.
3. Please provide both variants in the abstract.
4. What is abdominalgia? What kind of neuritis is this?
5. What are the lactate levels?
6. What type of seizures?
7. Do authors think that lactic acidosis was associated with vertical gaze palsy?
8. This is not a pyridoxine dependent epilepsy, it is hyperprolinemia type II causing secondary pyridoxine deficiency and seizures. Please correct.
9. What are other clinical features of this patients?
10. All genes are "italic", please correct throughout the manuscript.

Introduction

11. Please correct deficit/mental retardation to intellectual disability.
Case presentation
12. Authors describe in introduction that the majority of cases present in the neonatal period. Their patient's history starts from 52 years of age. Was the patient's history until 52 years completely normal?
13. Again please clarify abdominalgia.
14. Why did authors decide to supplement vitamin B6 and what stage did they supplement? What was the dose?
15. How did authors exclude porphyria and MERRF? Please include.
16. Why did authors measure vitamin B6?

Discussion
17. What are the proline levels in malnutrition and liver disease?
18. Summarize adult onset HPII cases and their symptoms as well as their diagnosis, if they were healthy.
19. It is not clear why authors choice to include rat studies, as they do not have any oxidative stress studies in their patient. Please clarify.
20. Severe lactic acidosis is not reported in patients with HP type II, what do authors think about markedly elevated lactate levels? Please explain this important point. Was there any lactate during the first 10 years between 52-64 years of age in this patient?
21. What do authors think that why this patient had vitamin B6 deficiency at the age of 64 years leading to epilepsy? What are the other HP II patients' clinical presentation, please summarize this in a table and discuss in the discussion section including biochemical parameters and lactate levels.

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.

No

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:

Needs some language corrections before being published

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