Reviewer’s report

Title: Novel phenotypic variant in the MYH7 spectrum due to a stop-loss mutation in the C-terminal region: a case report

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Reviewer: Chiara Fiorillo

Reviewer’s report:

Doctor Bánfai and colleagues describe an interesting MYH7 mutated patient with peculiar phenotype. Albeit neck weakness has been frequently reported in association with MYH7 defect, I think it is always important to stress this clinical presentation.

The histopathology is well pictured and few fascinating considerations are made on the possible source of the protein accumulation.

Mutation also is remarkable as it affects the COOH terminus causing a stop loss effect with expected elongation of the protein.

All these considerations however are not fully highlighted in the text and efforts should be made to point out more clearly these interesting arguments of discussion.

My major concern is the English writing which is appalling, confusing, often misspelled and grammatically incorrect.

For instance subject should always matches the verb (defects of myosin heavy chain I slow myosin isoform coding MYH7 gene primarily causes..). Attention should be made to plural and correct grammar (since the beginning of the diseases? neuromuscular disease was not reported at (IN) his parents, muscle biopsy indicated (INDICATING?) myopathy and sarcoplasmic storage material)

Some sentences are not understandable (muscle fibers can be classified both by the myosin isoforms it contains and by its typical metabolic pathway.. you mean the myosin isoform contained in the muscle fibres? ) Again the sentence It is responsible for the symptoms associated with Laing Distal myopathy is either incorrect or wrong. It is not clear what IT is referred to.

In introduction the sentence oxidative metabolism dominates in type I and type IIa fibers and glycolytic metabolism is the characteristic of IIb fibers can be deleted as it is not relevant here

Authors declare that the neck anteflexion was severely weak (MRC 95 2/5), whereas the retroflexion was almost normal (5-/-5). However patient needs to hold head when standing. Does this mean that the head tends to fall forward? In that case this would be a defect in pulling back...
the neck, right? So retroflexion should be more impaired. In addition Figure 1 does not show the neck weakness as expected, which would be interesting.

In MRI result I suggest to specify also in text that tibialis anterior muscle is the most affected muscle as this is the hallmark of MYH7 patients. Refer to reference18.

The correct/updated nomenclature for the pathogenetic mutation (c.5807A>T) and for the other reported variants (c.?) should be used through the text.

The sentence: none of them cause any aberrations in a phenotypic level is not clear to me. Please explain and provide further details. Were the variants synonymous? Are they reported in healthy subjects? Did authors test the pathogenicity with prediction softwares (such as sift, polyphen) and cross check with common mutation database.

What is MYH11, you mean MYH7?

Paragraph CONCLUSION can be divided in DISCUSSION and CONCLUSION which can be even a single sentence of closing remarks/take home message.

Lastly this recent work on the topic should be added in the discussion and commented for possible similarities and differences:


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.

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

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Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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