Reviewer’s report

Title: Characteristics of neurological Wilson's disease with corpus callosum abnormalities

Version: 2 Date: 29 Nov 2018

Reviewer: Imran Rizvi

Reviewer's report:

The study presents interesting finding of CC involvement in patients of WD. However the manuscript is still poorly written and needs major revision. I have the following suggestions to make.

Title: Title of the manuscript should be rephrased to make it more comprehensible.

Abstract:

The authors have written the P values as 0.00; which should be changed to 3 decimal places and if it still remains zero then it should be re written as P<0.001.

The results written in the abstract section should be rewritten it contains grammatical errors and is not clearly conveying the message.

The UWDRS scores should be presented in the form of median (IQR) rather than a mean ±SD.

Conclusion of the abstract section should also be rephrased as "Wilson's disease can involve the posterior as well as the anterior part of CC; and patients with CC involvement had more extensive....

Introduction:

The authors have claimed that the detection of CC abnormalities can result in early diagnosis and improve therapy. How is that possible? I do not agree with this statement.

They should simply write that the aim of the study was to detect the frequency of CC involvement in patients of WD; and to study differences in the clinical, biochemical, and neuroimaging features in patients with or without CC involvement.
Results:

The long subheadings given in the results section are not appropriate they should be shortened.

I suggest subheadings like

Baseline characteristics

Differences in the clinical features of patients with or without CC involvement

Differences in the biochemical/laboratory features of patients with or without CC involvement

Differences in the neuroimaging features of patients with or without CC involvement

In the results sections the authors have described few things which should be described in the methods sections. Like assessment scores, blood sample collection etc should be described in the methods sections and not in the results section.

In the conclusion sections the authors have again claimed that the findings of their study can help in early diagnosis and better management. I think this is not correct, rather the authors should simply mention that CC involvement (both anterior and posterior) can occur in WD, the radiologist and clinicians should keep this minds. The authors can also mention that patients with CC involvement can have more severe and extensive disease.

They should also mention that this study is retrospective and a prospective study with larger sample size may convey more information regarding the frequency and significance of CC involvement in WD patients.

In the image F the CC involvement is not very clearly visible.

**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.

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.

I am able to assess the statistics

**Quality of written English**

Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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