Reviewer’s report

Title: Effect of Oral Colchicine on Peripapillary Retinal Nerve Fiber Layer Thickness in Patients with Familial Mediterranean Fever

Version: 2 Date: 27 Nov 2017

Reviewer: Doreen Schmidl

Reviewer’s report:

This is an interesting and well written manuscript investigating a potential effect of oral colchicine treatment on peripapillary retinal nerve fiber layer thickness in patients with familial Mediterranean fever. Although the authors are addressing an important issue, there are several points that need to be clarified.

1. Most importantly, as the study did not reveal a significant difference, the authors need to comment on the power of the study to detect differences. What was the minimum detectable difference in the selected sample size? This is crucial to convince the reader that the study was not underpowered. This is also important because one of the measured parameters almost reached level of significance.

2. The authors state that this was a prospective study. In my point of view, this was a cross sectional design with an untreated control group. Please clarify.

3. The authors have included 2 control groups, consisting of untreated patients as well as healthy subjects. It is not clear in the results section what is referred to as „control group“. Please separate more clearly the three different groups throughout the whole manuscript, in particular in the results section. In addition, when the authors report on the subgroup analysis, it gets even more confusing. Please revise the results section to make it more easy for the readers to distinguish between the treated patient group, the untreated patient group and the healthy group.

4. In the results section it is stated that no difference was observed between the three groups in any of the quadrants. However, based on the 4 p-values, it is not clear which tests were performed between which groups. Please revise.

5. In the subgroup analysis it is not clear what is the N for each subgroup. Is the sample size of the subgroup large enough to allow conclusions?
6. In the subgroup analysis the authors report mean thickness and thickness values for all quadrants. However, for the whole group, no mean thickness values are reported. Please comment.

7. "None of our patients had a severe score" This phrase is unclear to me. Please reconsider.

8. As no difference as found in respect to the different severities, I don't feel that this additional subgroup analysis adds much information and can maybe omitted, also in respect to the small sample size in this subgroups.

9. The language still requires revision. There are several grammatical error and misspellings in the manuscript, i.e. „We didn't found a statistical significant difference…”

10. Did the authors take blood samples of TNF-alpha and/or IL-1ß? This would be interesting to correlate to the results.

11. The authors may want to add a figure showing the main results of the study.

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

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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