

Reviewer's report

Title: Changes in Macular Sensitivity after Half-Dose Photodynamic Therapy for Chronic Central Serous Chorioretinopathy

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Reviewer: Tomas S. Aleman

Reviewer's report:

Atik et al. present a well-conceived study where changes in visual sensitivity are explored following half-dose photodynamic therapy (PDT) as a treatment of persistent or chronic central serous chorioretinopathy (CSCR). They used automatic static perimetry before and after PDT and conclude there were significant changes in sensitivity following this type of treatment. The results are indeed interesting specially since there are only rare occasions where treatments for CSCR have been scrutinized in this detail. The manuscript is thus relevant to the understanding of this condition and on the impact that treatments have on vision, not only visual acuity (VA). My main concern has to do with the interpretation of the findings. That is, without measurements (or reference to) the range of intervisit variability expected for the sensitivity or retinal thickness measures it is hard to estimate if the changes observed are clinically significant, although it is obvious that they are statistically significant. This is perhaps less important for central foveal thickness (CFT) measurements as the changes are without doubt beyond variability. If such estimates are not available, then the authors should use estimates from the literature and emphasize other features that support a change in sensitivity that could only be explained by the treatment. For example, use of interocular comparisons and/or the relationship between each of the parameters (VA, CFT, 4deg 10 deg MS), time-course of changes.

Also unless I am reading this wrong, I would strongly disagree with the use of dilated choroidal vasculature in itself or a thickened choroid should be an inclusion criteria. If there is no clinical, OCT or angiographic evidence of CSCR. If the cohort was limited to patients with CSRC and pachychoroid then this should be clearly stated and discussed, since this would be a specific subtype of CSCR. The same applies for sub-RPE or RPE separations. There are multiple instances in the manuscript where 'and/or serous RPE detachment' is used. Serous RPE detachment is not CSCR unless they are sequelae. That is, CSCR should occur at least at some point as a separation of the retina and RPE.

Other comments:

Abstract: please mention what type of perimetry was used.

Methods: How did you determine the mean defect, PSD and sensitivity for the central 4 deg. It is my understanding this is not a standard parameter output of the 10-2 protocol.

Please specify what type of visual acuity notation is being listed (logMAR, decimal fraction).

Results:

I would emphasize on the differences between your findings at 4 deg and 10 deg as well as on the relationship between each of the parameters, namely, VA, CFT

Please realize that P values should not be quoted as zeros.

Sensitivity and md are saying the same thing

Weha tis significant here

Interesting that the fovea improved more than the entire macular

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.

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 am able to assess the statistics

Quality of written English

Please indicate the quality of language in the manuscript:

Acceptable

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