Reviewer’s report

Title: A case of proliferative diabetic retinopathy in which scintillating particles appeared in the intravitreal cavity after laser photocoagulation

Version: 1 Date: 28 Oct 2017

Reviewer: Sentaro Kusuhara

Reviewer’s report:

The manuscript entitled "A case of proliferative diabetic retinopathy in which scintillating particles appeared in the vitreous cavity after laser photocoagulation" by Kohmoto R, et al.) is a case report documenting the appearance of iridescent crystals in the preretinal vitreous after two sessions of panretinal photocoagulation. As this is a rare case with a unique and startling finding, it is worth being reported. Accordingly, I recommend publication of the manuscript in BMC Ophthalmology pending adequate response to the following concerns.

1) Page 2, line 5: as this is a case report, the description "The case in this study involved a patient" is unlikely to be suitable.

2) Page 2, line 6: is it true that scintillating particles were observed DURING the third PROCUDRE? I guess the particles were observed during the examination before the third session of panretinal photocoagulation.

3) Page 2, line 10: the authors seems to have a weak evidence to use a word "theorized" here.

4) In Background and Discussion: the multicolored particles in this case resembles those in synchysis scintillans. As particles seen in synchysis scintillans is thought of as cholesterol crystals, the authors have a bias in favor of crystallin.

5) Page 4, line 4: please refer to #2.

6) Page 4, line 6: does "examination of the front of the lens by slit-lamp microscopy" mean "slit lamp biomicroscopy with contact lens"?

7) Page 4, line 8: Is there evidence that the appearance seen in Christmas tree cataracts is caused by the accumulation of crystallin particles? In my quick PubMed search, cystine would be a candidate.

8) In Case presentation, the temporal change in visual acuity should be provided.

9) In Case presentation, OCT images should be presented if available.
10) In Discussion: the authors should discuss the following questions: (1) The reason why the fellow eye did not develop scintillating particles though treated with panretinal photocoagulation (PRP). (2) The underlying mechanisms that most of DR eyes treated with PRP do not have scintillating particles.

11) In Conclusion: the message described here is different from that in Conclusion of Abstract. Again, this is not the first STUDY (maybe the first case report). In my opinion, the most important message to readers is that these startling iridescent crystals are symptomless and can be followed up without any treatment.

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.

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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