Reviewer’s report

Title: The necessity and optimal time for performing pars plana vitrectomy in acute retinal necrosis patients

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Reviewer: Sibylle Winterhalter

Reviewer's report:

Shulin Liu et al submitted their article „The necessity and optimal time for performing par plana vitrectomy in acute retinal necrosis patients.” to BMC Ophthalmology. The article presents 30 patients (34 eyes) with ARN, who were either treated with antivirals (intravenous and intravitreal) only or antivirals in addition to early PPV or PPV in case of retinal detachment. The results are not totally new, but I think that it is really important to publish such data for a broader readership and to show that early PPV is not beneficial in ARN patients.

Therefore I have only some comments and recommendations:

- Introduction, page 4, line 78: please include „to treat vitritis, optic nerve head neuritis and vasculitis” after systemic steroids to clarify the therapeutic target of additionally given steroids.

- Intrduction, page 4, line 80: please include: retinal detachment is „one of the main causes” of this poor result, because optic neuritis, macular edema and vasculitis are further reasons for poor final visual acuity.

- Material and methods, page 5, line 92: Did you perform anterior chamber or vitreous tap for viral proof? This would be really important to know, because CMV associated ARN should be treated primarily with ganciclovir instead of acyclovir. Anterior chamber tap is easy to perform with a high diagnostic value. Please clarify your diagnostic approaches.

- Material and methods, page 5, line 101: 2 months of oral antiviral therapy following intravenous therapy is much too short. Most bilateralisations of ARN occur during the first 12-14 weeks, so it would be better to treat the patients with a longer oral antiviral medication phase.

- Table 1, please write BCVA in logMAR as well not in decimal and edit the table on one page
- Discussion, page 10, line 194: please insert after … contralateral eye „and does not treat a possible concomitant herpetic encephalitis or meningitis."

- Discussion, page 11, line 206 to 207: please explain level II and level III studies.

- Discussion: the conclusion of the working title „The necessity and optimal time for performing par plana vitrectomy in acute retinal necrosis patients.‖ is missing.

**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 am able to assess the statistics

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