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Long-term remission of neovascular age-related macular degeneration with as-needed antivascular endothelial growth factor therapy

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Summary

The authors are commenting the letter to editor regarding article entitled “Long-term remission of neovascular age-related macular degeneration with as-needed anti-vascular endothelial growth factor therapy” published in *Retina Journal* 2017; Doi:10.1097/IAE.0000000000001572. February 17, 2017.

Keywords

age-related macular degeneration; prognosis; long-term remission

We thank Calugaru et al.¹ for great interest to our manuscript entitled ‘Long-term remission of neovascular age-related macular degeneration with as-needed antivascular endothelial growth factor therapy’.² We address the points raised as follows:

1. As mentioned in the discussion section, the retrospective nature of the study with a relatively small number of study population was considered as one of the limitations of the manuscript. However, since long-term remission is not a common presentation of neovascular AMD (11.6% as found in our study) that requires ongoing treatment, the small number of eyes included may be related to disease’s own nature rather than the weakness of our study.
2. As stated in the abstract and results section, there was no patient with RAP in the control group. We agree that evaluating parameters would be interesting, however even in CATT study where the characteristics of the patients with RAP have been reported, there has been no data regarding the subtypes of RAP lesions.³
3. Although use of indocyanine green angiography (ICG) would provide more information on the subtypes of neovascular AMD lesions such as polypoidal choroidal vasculopathy (PCV), we have not performed ICG for all cases. Moreover,

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patients with neovascular AMD have not been categorized as a subgroup in randomized-controlled clinical trials such as CATT trial,⁴ indeed PCV has been considered as a variant of AMD.

4. We agree that data on the types of intraretinal fluid would be interesting, due to low number of included eyes, we believe that further evaluation of intraretinal fluid subtypes would not yield a statistically significant value.

5. We agree that integrity of outer retinal layers may have an impact for the long-term remission and visual prognosis. However, instead of evaluating the integrity of these layers individually, we evaluated presence of macular atrophy which was defined as loss of outer retinal layers and retina-pigment epithelium (RPE) with increased hyperreflectivity of choriocapillaris within 500 microns of in either direction of fovea on optical coherence tomography scans and found that patients with macular atrophy were more likely to get long-term remission than those without atrophy.

6. 7. Though evaluating mentioned parameters and including them in a univariate and multivariate analysis would be interesting to show the best predictors of long-term remission, presence of several parameters would not be accurate in such a study with small of number of included eyes in terms of the statistical power of the study.

8. Though aging may be one of the causes of retinal thinning in AMD patients, there was no significant difference in the mean age of patients between the control group and long-term remission group. Thus, the difference in the mean subfoveal thickness can not be explained by age-related thinning as contrary to authors' assumption.

9. We believe that it would be over speculation to claim that patients were insufficiently treated in our study population. As we showed in our previous report,⁵ step-wise algorithm with aflibercept regimen provided some benefits in the treatment of neovascular AMD patients when there was a persistence and/or recurrence of retinal fluid and/or exudation.

10. We agree that it was an interesting finding that despite the significant difference in the proportion of macular atrophy between the two groups, the vision improvement at final visit was similar among the two groups, we believe that this finding may be related to extent of macular atrophy. It is highly likely that patients with a greater extent of macular atrophy may have had lower vision improvement.

In summary, despite the limitations that were mentioned by the authors, our study was the first study to show the presence of long-term remission of neovascular AMD patients and to evaluate the factors related with presence of long-term remission. Further studies with a higher number of patients and additional parameters would provide more insight on the prognosis and progression of neovascular AMD.

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References

1. Cugurru D, Cugurru M. Letter to the editor: Long-term remission of neovascular age-related macular degeneration with as-needed anti-vascular endothelial growth factor therapy.
2. Muftuoglu IK, Alam M, You QS, et al. Long-term remission of neovascular age-related macular degeneration with as-needed anti-vascular endothelial growth factor therapy. *Retina*. 2017 Feb 17. [Epub ahead of print]. doi: 10.1097/IAE.0000000000001572
3. Daniel E, Shaffer J, Ying GS, et al. Comparison of Age-Related Macular Degeneration Treatments Trials (CATT) Research Group. Outcomes in Eyes with Retinal Angiomatous Proliferation in the Comparison of Age-Related Macular Degeneration Treatments Trials (CATT). *Ophthalmology*. 2016; 123:609–616. [PubMed: 26681392]
4. Maguire MG, Martin DF, Ying GS, et al. Five-year outcomes with anti-vascular endothelial growth factor treatment of neovascular age-related macular degeneration: The Comparison of Age-related macular degeneration Treatments Trial. *Ophthalmology*. 2016; 123:1751–1761. [PubMed: 27156698]
5. Muftuoglu IK, Tsai FF, Gaber R, Alam M, Meshi A, Freeman WR. High-frequency aflibercept injections in persistent neovascular age-related macular degeneration. *Graefes Arch Clin Exp Ophthalmol*. 2017; 255:709–717. [PubMed: 27878592]