Reviewer's report

Title: Mature Vessel Occlusion after Anti-VEGF Treatment in a Retinal Arteriovenous Malformation

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Reviewer: Seong Joon Ahn

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This report showed the case with occlusion of middle-sized vessel following bevacizumab. They suggested that anti-VEGF induced the occlusion from fundus photograph obtained at 6 months. However, the association between the vessel occlusion and anti-VEGF is questionable. First, pre-treatment photograph showed ghost vessel, indicating that the occluded vessel was prone to be occluded even without anti-VEGF therapy. Second, 6 months after the last injection, bevacizumab will be eliminated in the eye, the vessel occlusion may have nothing to do with anti-VEGF treatment. If the authors showed vessel occlusion at shorter follow-up period, it would be more appropriate to suggest the association. I believe that if the authors demonstrate the vascular changes following each of 3 injections, it would be more interesting and convincing. Furthermore, the authors should provide the rationale for repeated injections of anti-VEGF in this case.

I don't agree with the conclusion that middle-sized vessel in the brain or heart can be occluded as the concentration of the drug within the eye (intravitreal injection) may be totally different from that in systemic circulation or other organs. Also, the occluded vessel was abnormal and thus, its generalization into normal brain or heart vessels seems inappropriate.

Minor errors such as fluorescence angiography should be corrected. Also, the fluorescein angiograph after anti-VEGF therapy should be provided to demonstrate vessel occlusion in Figure 1.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.