**Reviewer’s report**

**Title:** Intravitreal ranibizumab or conbercept for retinal arterial macroaneurysm: a case series

**Version:** 0  **Date:** 02 Dec 2018

**Reviewer:** Solmaz Abdolrahimzadeh

**Reviewer’s report:**

The authors present 3 cases of retinal arterial macroaneurysm treated with anti-VEGF therapy; ranibizumab in two cases and conbercept in one case. The report is interesting as, at present, there are still no standard therapeutic guidelines for RAM and conbercept has not been previously used. Furthermore, the authors provide an OCT-A image for one case of retinal arterial macroaneurysm.

Abstract

It would be useful to add the number of injections and intervals between injections in each case to the abstract.

The introduction in the abstract states that anti-VEGF therapy is the "current option to be used", whereas at the end of the introduction lines 46-47 the authors state that "there are several treatment options to be chosen with the various outcome (5-7) but no consensus has been reached" Please modify the abstract to convey that there is no standard treatment but anti-VEGF is one of the current preferred options….

Case descriptions

Did the patient history show systemic disease other than hypertension?

Please include findings of the comprehensive ophthalmological examination such as pupil responses etc. Differential diagnosis in RAM is not always straightforward and it would be useful if the reader can follow presented a step--by-step diagnostic workup.

Case 1: The patient was allergic to the contrast medium and fluorescein angiography was not performed; please specify in text why indocyanine green angiography was not performed (cross allergic possibility or other…?)

Please explain the rationale for the choice of ranibizumab in case 1 and 2 and conbercept in case 3? This is a most important section to develop on, as the authors are the first to report use of conbercept in RAM.
Discussion

In the discussion the authors do not mention other therapeutic options in particular laser therapy. A brief discussion of management modalities, and possible complications, would enhance the paper.

It would also be useful to insert a step-by-step diagnostic workup for diagnosis of RAM, especially since the authors have shown various imaging modalities.

When discussing the rationale for anti-VEGF therapy the authors have listed two reasons: please expand on the nitric oxide theory and also explain the role of anti-VEGF on coagulation and fibrinolysis.

In addition, local ischemia and consequently up-regulation of VEGF in RAM has been hypothesized - please detail and expand.

The manuscript would necessitate a complete revision of the English language as there are numerous grammatical errors throughout which make the report difficult to follow.

Abbreviations: Please add SRH, CMT (and check all)

Table

This table shows the case characteristics and lists SRH (subretinal haemorrhage) in all three cases. It is important to be consistent in the text and table so please clearly specify the type of haemorrhages in the case descriptions in the text (it is important to clearly state and possibly differentiate between preretinal, subretinal, and vitreal haemorrhages) - this is valuable for the management strategy as subretinal haemorrhage yields the worst outcome due to rapid damage to photoreceptors and irreversible vision loss. This should be highlighted in the text.

Figures and figure legends

Please put the time (months from baseline/injections) in the legends for all figures as "final visit" is not clear (ie does this mean final visit at the end of follow up or following therapy?..) The English of all the figure legends needs to be carefully corrected as it is fundamental for the reader to follow the chronology and read the corresponding descriptions without having to go back to the text.

Figure legend 2: the legend states "arrow" for figure 2b but this has not been put on the actual figure; either change the legend or add arrow to the figure please. Specify what "final visit" corresponds to (the time elapsed from baseline and injection)

It would be valuable if the authors showed OCT angiograms for all the cases, if this was performed. OCT angiograms - could the authors add slabs?
Figure 3: Is figure 3d the same as 2e? I do not think that figure 3 adds more information to figure 2; furthermore, the OCT images are not quantified for reduction in thickness and the resolution is not enough to give valuable info for the SRF - perhaps the authors can eliminate this figure 3.

Figure 4: Although the OCT images show improvement, they do not quantify reduction of central macular thickness, the OCT in section 4h does not seem to be a scan of the fovea. Please check for resolution, especially for OCT images.

**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.

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.

Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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