Author’s response to reviews

Title: Choroidal neovascularization emerged right from the focal choroidal excavation in eyes with central serous chorioretinopathy post half-dose photodynamic therapy: A case report

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Author’s response to reviews:

Dear editors and reviewers,

Thanks a great deal to you all for raising valuable comments to my work from busy schedule. Your specialized comments widen and deepen my awareness and understanding of the whole structure and contents of my article. We have addressed the comments raised, and the amendments are as followed.

Michael Paul Blair (Reviewer 1):

1. Both reviewers brought up that a strong conclusion could not draw from a case-report. After carefully thoughts, I agree with the opinion, and there also has been studies reporting stabilized visual benefits in same disease post half-dose PDT. Therefore, I modified my conclusion that “although half-dose PDT has proven to be safe in treating CSC, due cautions should be exercised, when treating eyes with CSC and concurrent FCE.”

2. In this study, the well response to anti-VEGF ranibizumab seemed to prove that the VEGF participated in the growth of CNV. However, the stabilized visual benefit of same cases in Luk’s study was also reported. Since there is no direct evidence that reflects the level of VEGF expression, PDT with anti-VEGF may also evoke controversy. Actually, anti-VEGF alone was once used to treating CSC with efficacy, and I even wonder whether this can be a choice in treating eyes with CSC and FCE. Before the final decision is made, may be a prospective, controlled study with larger sample is more appropriate, to evaluate the safety profile of PDT combined anti-VEGF in eyes with CSC and FCE, or lay the root for importing new safe and effective treating modality.
3. The panel “g” in figure 2 legend was advanced before “f”, which seemed to be a less rational arrangement. Thus, I reconstruct the figure 2 legend and describe the figure in sequence.

Seong Joon Ahn, M.D. (Reviewer 2):

1. I recommended in limitation that “this study is a sporadic cases report whose results are not strong enough to reach to a general conclusion for most cases”. However, I have drawn a conclusion with too much certainty. Actually, different outcome has been reported in same cases with same intervention. And a prospective, case-controlled clinical trial with a larger sample size may be required to assess the safety profile. As a result, I modified the conclusion that “due cautions seemed to be exercised in eyes with CSC and FCE.”

2. I have reconstructed the discussions and analyzed the underlying possible pathogenic association as much as possible.

A half-dose of PDT, as the only intervention, appeared to be partly involved in the development of CNV. PDT was imported to reduce choroidal exudation and consequently SRF in CSC, as the mechanism seemed to halt choriocapillary hyperperfusion. However, the standard PDT was found to enhance expression of VEGF in choroidal epithelial cells, modification was brought up, in treatment parameters. Lots of studies have reported the safety and efficacy profiles of CSC treated by half-dose PDT.

As for eyes affected by CSC and FCE, it may be less wise to perform PDT, since the evidence of local choroidal ischemia has been found in some cases of FCE. In this study, the FCE lesion was entirely covered in the PDT irradiation. In Case 1, the sign of ischemia underlying the FCE (fig 1i) was obvious post treatment. In Case 2, both eyes received PDT irradiation, but the secondary CNV only grew in the eye with FCE, in spite of larger treated area in the fellow eye. This appeared that half-dose PDT was relatively safe in eyes with CSC alone, but not safe enough in eyes with CSC complicated FCE.

3. I have my article for language polishing and paid for professional help in revising this manuscript. A new version has created and uploaded.

4. This article is indeed retrospective and I have corrected the study design.

5. The irradiation areas have been labeled in a red round circle, and readers can soon find the treated zone, where the FCE is inside it.

6. Unfortunately, no FA/ICG image has recorded the time of active CNV. Case 1 was the first case we met, and we got to know that the induced CNV would regress easily in one injection of ranibizumab. When the same consequence occurred in case 2, immediately he was instructed to the treatment of anti-VEGF. As a typical CNV has showed on OCT, no angiography was needed to confirm the diagnosis. Also, an appointment for angiography is necessary before operating in our hospital; it would take time, even leading to the postponing of the injection, so we did not perform the angiography at that time.

A revised version has been re-submitted for your consideration. We hope that the revision is acceptable, and are also willing to response to your new comments. Looking forward to hearing from you soon.
Yours sincerely,

Lei Li