Author’s response to reviews

Title: Report of Two Cases of Posterior Choroidal Leiomyoma Pathology Features and the Results of Treatment

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Author’s response to reviews:

Dear Editors:
On behalf of my co-authors, we thank you very much for giving us an opportunity to revise our manuscript, we appreciate editor and reviewers very much for their positive and constructive comments and suggestions on our manuscript entitled “Report of Two Cases of Posterior Choroidal Leiomyoma Pathology Features and the Results of Treatment” (BOPH-D-20-00139). We have studied reviewer’s comments carefully and have made revision which marked in red in the paper. We have tried our best to revise our manuscript according to the comments. Attached please find the revised version, which we would like to submit for your kind consideration. We would like to express our great appreciation to you and reviewers for comments on our paper. Looking forward to hearing from you.

Thank you and best regards.

Yours sincerely,
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List of Responses
Dear Editors and Reviewers:

Thank you for your letter and for the reviewers’ comments concerning our manuscript entitled “Report of Two Cases of Posterior Choroidal Leiomyoma Pathology Features and the Results of Treatment” (BOPH-D-20-00139). Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval.
Revised portion are marked in red in the paper. The main corrections in the paper and the responds to the reviewer’s comments are as flowing:

Responds to the editors and reviewer’s comments:

Editor Comments:
It would be nice if the last visit posterior segment photos of the patients would be presented.
Response: As editors suggested that we added the last visit posterior fundus photos of the two patients, Fig 1.E and Fig 2.E respectively.

Reviewer #2:
Response to comment:
1. Title could be shortened.
2. Abstract: The best corrected visual acuity is mentioned in logMAR. A conversion to Snellen equivalent would be easier for the readers to understand.
4. Page 2, Background, Line 52: Intraocular leiomyoma can occur in iris, ciliary body and posterior choroid. The treatment choice is based on tumor location and size. It's unfair to mention enucleation as a common management tool without proper context.
5. The case description would be more comprehensive if some clinical details (if available) could be facilitated:
   a. Associated systemic (uterine) fibroids
   b. Trans-scleral transillumination
   c. Suprachoroidal location on ultrasound
   d. PET-CT scan: negative
6. Page 3, Case 1, Line 62: differential should include amelanotic melanoma.
7. Were HMB-45/Melan A performed for the case1 and HMB-45 for case 2? HMB-45 is more specific for immature melanocytes and a negative report would help rule out melanoma.
8. It is nearly impossible to diagnose a leiomyoma from uveal melanoma without a histopathology and immunohistochemistry. For example, your case 1 had a mushroom shaped lesion and case 2 had a dual circulation on fluorescein angiography, features more suggestive of uveal melanoma. In case of uveal melanoma, endoresection is fraught with risk of incomplete excision and recurrence. The latter is known to increase risk of metastatic disease by 6.3x. (Ophthalmic Oncology Task Force. Local recurrence significantly increases the risk of metastatic uveal melanoma. Ophthalmology. 2016;123(1):86e91). What was the clinical decision-making process in these cases?

Response:
1. As editors suggested that we have shorten the title to “Pathology Features and the Results of Treatment of Two Cases of Posterior Choroidal Leiomyoma”.

2. It is really true as Reviewer suggested that the BCVA in Snellen conversion would be easier for the readers to understand, we have made conversion according to the Reviewer’s comments.


4. We have revised this part according to the Reviewer’s good suggestion.

5. Considering the Reviewer’s suggestion, we have supplemented the clinical details of the two cases.
   a. The case 1 had a history of small uterine fibroids and was not treated surgically, while case 2 had no family history of systemic (uterine) fibroids or any subtle clinical signs associated with the disease. The clinical history of them has been added to the paper. To our knowledge, this is the only Asian woman with choroidal leiomyoma and hysteromyoma. Although the cases of intraocular mesodermal leiomyoma expressing progesterone and androgen receptor have been reported (Quhill H1, Rennie IG, Rundle PA, Mudhar HS. Three cases of intraocular mesectodermal leiomyoma expressing progesterone and androgen receptors. Eye (Lond). 2013;27(5):669-72. doi: 10.1038/eye.2013.37), there is no evidence for the relationship between uterine fibroids and choroidal leiomyoma.
   b. As for the tumors were located in the posterior pole, it was difficult to perform trans-scleral transillumination, therefore, before the vitrectomy, we used endo-light source to conduct transillumination and find the tumors were transmitted light.
   c. For the location of tumors has been described in the fundus examination, so we did not repeat the description of tumor location in the ultrasound examination.
   d. PET-CT scan was performed and excluded metastases.

6. We are very sorry for our incorrect writing and have made the correction.

7. Yes, IHC of HMB45/Melan-A were performed for both of case 1 and case2, and all results were negative. Therefore, the pigment cell origin of the tumors could be excluded. The resulting has been added to the paper.

8. In the two cases, under indirect ophthalmoscope, they were nonpigmented tumors, especially for the two cases, the tumor with obvious yellowish intraretinal exudations, however, choroidal melanoma with yellow exudation was very rare. Furthermore, CDI does not show the typical choroidal excavation sign of choroidal melanoma. Moreover, MRI also lacks the typical features of melanoma, so it lacks the evidence of supporting the choroidal melanoma. After careful consideration, we decided to adopt the treatment of local resection to remove the intraocular tumor, performing the pathological and immunohistochemical examination to confirm the nature of the tumor.
9. When we perform endoresection surgery by PPV, we found the tumor boundary was clear and with intact "capsule", which could achieve blunt separation and complete removal of the tumor, and the risk of recurrence was very low.

Special thanks to you for your good comments.

Other changes:
1. Line 22-24, the statements of “Report of Two Cases of Posterior Choroidal Leiomyoma Pathology Features and the Results of Treatment” were changed as “Pathology Features and the Results of Treatment of Two Cases of Posterior Choroidal Leiomyoma”.
2. Line 52-54, “As for its rarity and ability to camouflage as melanoma, enucleation was common management for intraocular leiomyoma in most of the previous reports.” was added.
3. Line 59, “The woman had a history of small uterine fibroids and was not treated surgically.” was added.
4. Line 65, “PET/CT scan was performed and excluded metastases.” was added.
5. Line 72-75, “As for the neoplasm was located in the posterior pole, it was difficult to perform transscleral transillumination, therefore, before the vitrectomy, we use endo-light source to conduct transillumination and find the neoplasm was transmitted light.” was added.
6. Line 87-88, “The woman had no family history of systemic (uterine) fibroids or any subtle clinical signs associated with the disease.” was added.
7. Line 96, “18F-FDG PET/CT has been underwent and no positive uptake in the other body parts.” was added.
8. Line 98, “The tumor exhibited marked translucency on transillumination.” was added.

We tried our best to improve the manuscript and made some changes in the manuscript. These changes will not influence the content and framework of the paper. And here we did not list the changes but marked in red in revised paper.
We appreciate for Editors/Reviewers’ warm work earnestly, and hope that the correction will meet with approval.
Once again, thank you very much for your comments and suggestions.