

## ROUND 1

Dear Reviewers:

Thank you for your letter and for the reviewers' comments concerning our manuscript entitled "Optic disc cupping associated with macular retinoschisis: a case report" (Manuscript NO: 71960). 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 by highlighting in the paper. The main corrections in the paper and the responds to the reviewer's comments are as follows:

Responds to the reviewer's comments:

Reviewer #1:

Response to comment: (The title may be modified as 'Optic disc coloboma associated with macular retinoschisis: a case report'.)

Response: The title have been modified as 'Optic disc cupping associated with macular retinoschisis: a case report'.)

Response to comment: (This may be omitted from the Key Words list.)

Response: 'Case report' have been omitted from the Key Words list.

Response to comment: (The Background part in Abstract may be modified as 'To report an unusual case of bilateral optic disc coloboma associated with macular retinoschisis in the left eye'.)

Response: The Background part in Abstract have been modified as 'To report an unusual case of bilateral optic disc cupping associated with macular retinoschisis in the left eye'.

Response to comment: (In the Case Presentation part of Abstract, the first line needs to be modified as the patient cannot present with 'the optic disc coloboma of both eyes, and the a macular retinoschisis left eye', rather the patient presents with some visual complains. Please modify the sentence.)

Response: In the Case Presentation part of Abstract, the first line have been modified as 'A 37-year-old woman complained of blurred and distorted vision in her left eye for >1 year'.

Response to comment: (In the Case Presentation part of Abstract, the word 'dark' may be omitted from the sentence 'serous detachment dark area is connected with the enlarged optic disc coloboma through the above-mentioned drainage gully-like structure'.)

Response: In the Case Presentation part of Abstract, the word 'dark' have been omitted.

Response to comment: (Please clarify the sentence 'it is mostly caused by congenital abnormalities, physiological large optic cups, glaucoma optic disc coloboma, and optic nerve atrophic coloboma' in the Background part of the Case Report.)

Response: 'Coloboma' was changed by 'Cupping' . Clinically, optic disc cupping is considered a bowl-shaped depression. The frequency of unilateral and bilateral occurrence is similar, and it is mostly owing to congenital optic disc abnormalities, physiological large optic cups, glaucoma optic disc cupping, and optic nerve atrophic cupping.

Response to comment: (Please reconstruct the sentences 'Denies systemic diseases. High myopia in both eyes was corrected with glasses, and there was no family history of eye diseases'.)

Response: The patient had no systemic diseases. There was no family history of ocular diseases.

Response to comment: (Please use past tense instead of present tense. Use the word 'both eyes' instead of 'two eyes'.)

Response: This paper has been changed with past tense. 'two eyes' have been replaced by 'both eyes'.

Response to comment: (Please mention full form of C/D. Please provide the HVF 24-2 reports.)

Response: We've added that full form of C/D. We're sorry we couldn't find the HVF 24-2 reports.

Response to comment: (Please clarify the sentence 'B-Scan scan left the macular retinal serous neuroepithelial detachment'. Please reconstruct the sentence 'B-Scan scan left the macular retinal serous neuroepithelial detachment, the discontinuity of the ellipsoid zone and the cleavage between the outer nuclear layer of the retina, en-face OCT shows the drainage-like structure formed by the defect of the optic disc nerve fiber layer between the optic disc and the macula, serous detachment the dark area and the enlarged optic disc coloboma inferior to the temporal area are connected via the above-mentioned canal and gully-like structure.' as this is too long and difficult to interpret. )

Response: OCT B-scan of the left eye revealed macular retinal serous neuroepithelial detachment, discontinuity of the ellipsoid zone, and fracture of the outer nuclear layer of the retina. We rewrote the long sentence.

Response to comment: (Please modify the sentence 'Magnetic head imaging showed no brain abnormalities.' Please reconstruct the sentence 'The posterior scleral macular buckling of the left eye was under general anesthesia on November 27, 2019.')

Response: Magnetic head imaging revealed no brain abnormalities. We rewrote the sentence 'On November 27, 2019, posterior scleral macular buckling of the left eye was performed under general anesthesia.'

Response to comment: (Please mention what are the investigations performed in each follow up visit and if possible, provide the images.)

Response: Re-examination was performed at 3, 6, 12, and 24 months after operation. OCT showed complete recovery of the left eye serous macular retinoschisis until 24 months after the operation (Figure 7). The visual acuity of the left eye was gradually improved to 20/33.

Response to comment: (Please provide citation for acquired secondary optic disc coloboma. Please modify the phrase 'Kuhnet al'.)

Response: 'Coloboma' was changed by 'Cupping'. 'Kuhnet al' was changed by 'Kuhn et al'.

Response to comment: (Please clarify the sentences 'The right eye was more obvious than the left eye. As a result, a serous macular retinoschisis occurred in the left eye'.)

Response: Further, 3D-OCT revealed more evident optic disc defects in the right eye than that in the left eye. Consequently, a serous macular retinoschisis occurred in the left eye.

Response to comment: (Please avoid repeated use of similar sentences like 'The pathogenesis of optic disc coloboma -related macular serous retinoschisis may be similar to optic disc pit-related macular serous retinal retinoschisis'.)

Response: The pathogenesis of optic disc cupping-related macular serous retinoschisis may be similar to optic disc pit-related macular serous retinal retinoschisis.

Response to comment: (Please clarify the sentence 'The vitreous body is produced during this period when the vitreous body is not completely detached afterwards'.)

Response: The age of onset is 30–40 years (the third decade). Posterior vitreous detachment appears gradually during this period.

Response to comment: (Please clarify and reconstruct the sentences 'For fluids derived from cerebrospinal fluid or vitreous liquids are not the main problem. The two liquids caused by the above factors may enter the macular retinal layer'.)

Response: For fluids derived from the cerebrospinal fluid or vitreous liquids, which is still debatable. Both the liquids may enter the macular retinal layer. The cerebrospinal fluid enters through the defect of the lamina edge, and the

vitreous humor enters through the deep cupping of the large optic disc related to glaucoma.

Response to comment: (Please clarify and reconstruct the sentence 'The transport of nutrients and metabolites in the retina is mainly Healthy Bruch membrane and RPE adjust the balance'. Please reconstruct the sentence 'The arcuate loop capillary network veins are responsible for transporting and regulating fluid'.)

Response: We deleted both the irrelevant sentences.

Response to comment: (Please omit the phrase 'To sum up' and modify the sentence.)

Response: Macular retinoschisis may be owing to the combined force of disc edge loss, enlarged optic disc cupping, the canal gully-like structure formed by the defect of the nerve fiber layer around the optic disc, and the traction of the posterior vitreous cortex.

Response to comment: (Please reconstruct the sentence 'Properly monitor patients with optic disc coloboma and macular degeneration'.)

Response: Proper monitoring of patients with optic disc cupping and macular degeneration is critical.

Response to comment: (Please avoid describing various parts of a single image separately, rather describe in a combined manner, i.e. 'Figure 1: Stereoscopic color photography of optic disc of right (1a) and left (1b) eye'. Please modify figure legends of all images in the similar manner.)

Response: We have modified figure legends of all images.

Response to comment: (Please avoid using complete terminologies repeatedly throughout the article, rather use the complete terminology for the very first time with the abbreviation mentioned alongside and only use the abbreviation subsequently, i.e. Both Eyes (OU), Right Eye (OD), Left Eye (OS) etc.)

Response: We have modified all abbreviation.

Response to comment: (Grammatical and sentence construction errors needs to be rectified appropriately throughout the article.)

Response: Grammatical and sentence construction errors have been rectified throughout the article.

Revised portion are marked by highlighting in the paper. 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. We appreciate for Reviewers' warm work earnestly, and hope that the correction will meet with approval.

Once again, thank you very much for your comments and suggestions.

Sincerely

Dr. Xiaoyan Peng

## **ROUND 2**

Dear Reviewers and Editors:

Thank you for your letter and for the reviewers' comments concerning our manuscript entitled "Optic disc coloboma associated with macular retinoschisis: a case report" (Manuscript NO: 71960). 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 by highlighting in the paper. Once again, thank you very much for your comments and suggestions.

Sincerely Dr. Xiaoyan Peng