Author’s response to reviews

Title: Characterization of Macular Thickness Changes of Leber’s Hereditary Optic Neuropathy by Optical Coherence Tomography

Authors:

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Author’s response to reviews: see over
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Title: Characterization of Macular Thickness Changes of Leber’s Hereditary Optic Neuropathy by Optical Coherence Tomography
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Version: 2 Date: 2014/5/21

Author response to Giacomo Savini:
Q1: Analyzing the total macular thickness rather than the ganglion cell layer thickness is a major limitation that precludes publication for this paper
A1: Limited by the instrument and analysis software we are available to employ, we could only study the total macular thickness. But with analysis of thickness of nerve fiber layer as well as the thickness of center ring, we could still come up with a conclusion about the change of the thickness of the ganglion cell layer.
Q2: Results and discussion have to be separate
A2: We have accepted your suggestion and corrected the issue in the paper.
Q3: Only one eye for patient should be analyzed.
A3: The experiment was conducted again and the results now were derived from the detection of single eye of each patient.

Author response to Piero Barboni:
Q1: Studying the total macular thickness the authors have missed the opportunity to study the natural evolution of RNFL
A1: The study of RNFL has been reported by Barboni et al in 2010, and we have cited the literature in the discussion.
Q2: GCL layers thinning in the acute and chronic stages of the diseases
A2: But with analysis of thickness of nerve fiber layer as well as the thickness of center ring, we could still come up with a conclusion about the change of the thickness of the ganglion cell layer.
Q3: Moreover, without segmentation they have missed information about external retinal layers (INL, photoreceptors).
A3: The change of the center ring thickness could be related to the change of the thickness of INL.
Q4: The authors should complete the study with macular segmentation
A4: Macular segmentation has been added to the paper.
Q5: The authors should also provide genetic information of patient cohort and correlate each mtDNA mutation with the results
A5: Genetic information of patient cohort has been added. Each mtDNA mutation has been correlated with the results. However, our sampling strategy was not based on the mutation site, the mutation sites within each group and the course of pathogenesis of the same mutation site were different. And the effect of mutation sites could not be compared in our research, we will set up larger sample size in future study to give a
comprehensive conclusion.

Q6: The result section contains considerations for the discussion.
A6: We have corrected the issue.

Author response to Jingjing Che:
Q1: The authors did quite a lot of comparisons on many index between healthy and patents in result part, however, I did not find any statistical analysis or description in table 1 and table 2, please address these issues.
A1: The summary of test-statistics has been added in the paper.
Q2: some error were found in subtitle "OCT procedure" in the "materials and methods" part, such as 6×6.....
A2: The errors have been corrected in the paper.

Author response to Dongsheng Huang:
Q1: Discussion is good, but the conclusion is little redundancy, the limitation of the whole study should be put back into the discussion part
A1: The structure of the paper has been adjusted according to your suggestion.