Author's response to reviews

Title: Macular Thickness Measurements in Healthy Norwegian Volunteers: An Optical Coherence Tomography Study.

Authors:

Alexandra Wexler (wexler@ntnu.no)
Trond Sand (Trond.sand@ntnu.no)
Tor B Elsås (Elsas@ntnu.no)

Version: 4 Date: 12 April 2010

Author's response to reviews: see over
Dear BioMed Central Editorial Team

Thank you again for your comments and instructions which have helped us to further improve the Discussion section of our manuscript.

The whole section has been considerably shortened and a few sentences were rephrased to be more concise, probably making the section more reader-friendly. Several references were removed accordingly. We hope the revised paper is acceptable for publication.

Reviewer 3 did not have any specific comment to the previous version. Our response to the specific comments and suggestions from Reviewer 2 follow below.

Reviewer's report
Title: Macular Thickness Measurements in Healthy Norwegian Volunteers: An Optical Coherence Tomography Study.
Version: 3 Date: 29 March 2010
Reviewer: Rong- Kung Tsai
Reviewer's report:
Authors have revised all my concern for comment. However, they extended the length of discussion between hormone and macular thickness and added the references from 30 to 86.

1. My major concern for the revised manuscript is that the main purpose of this study is to test author’s hypothesis: MMT measurements in Norwegians could differ from measurements in other populations (P5L8). The second goal is to assess the effect of age, gender, parity and the use of oral contraception on macular thickness in our study sample. The lengthy discussions between estrogen and macular thickness are speculative and confusion. Take an example: The data on Table 4 do not support following discussion: P12L11 (Normal aging seems to affect macular cone function [46] but not foveal cone density [47]. Most [44, 45, 48-54] but not all [28, 55] studies on the OCT did not report an association between foveal thickness and age in mixed gender group, which is in agreement with our study. However, our data suggest an increase in foveolar thickness with increasing age, which also confirms Kashani et al.’s [30] observation.)

Thank you for your comment. The description of our main goal as Reviewer 2 reminds us of, has been included in Conclusions section “….measurements in healthy Norwegians did not differ from measurements in other whites.”.

Please note that MMFT reflects foveolar and MFT reflect foveal thickness. We have introduced this precision also in Table legends and in the cited Discussion paragraph.
It should now be less ambiguous that the significant correlations in Table 4 indeed do support our point in the Discussion.

2. Discussion P14L8 "This is congruent with our hypothesis that subclinical age-related para-inflammation may accelerate with declining estrogen levels and thus lead to increased MFT on the OCT." This hypothesis did not appear in introduction and cannot be tested by the data provided in this study. The reasons are: 1. no estrogen level been tested and 2.OCT is not a functional but an anatomic measurement.

Thank you for your comment. We agree that it was not our hypothesis to relate estrogen to macular thickness. Hence we have reformulated this sentence to make it clear that the suggested mechanism is a possible explanation for our findings: ..”It may accordingly be speculated that subclinical age-related para-inflammation may accelerate with declining estrogen levels and possibly explain the age-related MFT increase on the OCT in women”.

3. This study provided some preliminary data between hormone and macular thickness. However, the discussion is far away from the evidences provided by authors. They should concise the discussion and delete the speculative part.

Thank you for your suggestions. The Discussion has been shortened considerably and 16 references have been removed accordingly. We believe that the section has become easier to follow in this shortened version.

Sincerely yours
Alexandra Wexler