• Comment •

Comment on: Evaluation of retinal and choroidal thickness changes in overweight and obese adults without ocular symptoms by swept-source optical coherence tomography

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Dear Editor,

We have read with interest the article by Li *et al*[1]. In the response to this article[1] which is a well thought out and written paper, I would like to draw attention to some critical points in this study and add some comments to the results and the conclusion of the study which authors have detected. In the Li *et al*'s[1] study, it is detected that, choroidal thickness is significantly negatively correlated with body mass index (BMI) and choroidal thickness is decreased in people with overweight or obesity. The choroid was significantly thinner in both the overweight and obesity groups compared to the normal group. These suggested that choroidal thickness was affected by overweight and obesity[1]. However, some few studies, the association of overweight or obesity with choroidal thickness remains conflicting[1]. Some studies showed that choroidal thickness was significantly negatively correlated with BMI[1-4]. On the contrary, Yumusak *et al*[5] and Bulus *et al*[6] compared the choroidal thickness of obese subjects and normal weight subjects using enhanced depth imaging (EDI) optical coherence tomography (OCT) and discovered that choroidal thickness was significantly positively correlated with BMI. In additon to these studies which refer to different results, we have detected that, subfoveal choroidal thickness was higher in both overweighted and obese patients than in the control (normal weighted and BMI) group[7]. Although our study was performed with optical coherence tomography angiography (OCTA), we also examined choroidal thickness across different BMI groups[7]. Both in the Li *et al*'s[1] and in our study[7], it is highlighted that, the association of overweight or obesity with choroidal thickness remains conflicting. As the authors highlighted in the Li *et al*'s[1] study, different OCT types such as SS-OCT, SD-OCT, can lead different results and conflicting detections. Similar to this comment of the Li *et al*[1], in our study, subfoveal choroidal thickness was measured by a different OCTA. In Li *et al*'s[1], choroidal thickness were measured by SS-OCT and averaged following the ETDRS subfield automatically with confirmed reliability. In our study[7], only subfoveal choroidal thickness was obtained. These different methods, could lead to different results and observations.

As all the authors stated in the both studies[1-7], even though clinicians are limited in pointing out any differential findings in obese patients only by fundus examination, different OCT types provides a predictable view of the changes in the retina and choroid in obese patients. These changes can be either in possitive or negative correlation with BMI[1,7]. Research on changes in choroidal thickness contributes to the understanding of the mechanisms of certain ocular disorders in overweight and obese adults. This association still remains quite controversial. The complete mechanism of the association between choroid thickness changes in the obese individuals also remains to be clarified.

We would like to send lots of respects to Li *et al*'s[1] for the publication of such a valuable manuscript.

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Conflicts of Interest: Alacamli G, None.

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