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Comment on Evaluation of Choroidal Vascular Changes in Patients with Multiple Sclerosis Using Enhanced Depth Imaging Optical Coherence Tomography

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Dear Editor

We have read and reviewed the article by Esen et al. [1] entitled 'Evaluation of choroidal vascular changes in patients with multiple sclerosis using enhanced depth imaging optical coherence tomography' with great interest. The authors examined the choroidal thickness (CT) in 68 eyes of 34 multiple sclerosis (MS) patients by using enhanced depth imaging optical coherence tomography. The CT was found thinner underneath the fovea and at all six measurement points in patients with MS compared to healthy controls. They also found that the CT measurements revealed no significant difference between MS eyes with a prior optic neuritis history and those without an optic neuritis history. We congratulate the authors for their valuable study and are eager to know more details of their work.

Primarily, various local and systemic physiologic and pathologic conditions may affect CT. It has been shown in the literature that age, sex, diurnal variation, systemic/local diseases and their

treatment, intraocular pressure, and many other factors have effect on CT [2, 3]. Although Esen et al. [1] have specified many factors in their study, we would like to address some points, which may also be important to consider.

For example, 45 of 64 study participants were females. Having considered the age of the participants, we would like to know, whether the menstrual cycle and pregnancy status of the female patients have been taken into consideration since it has been shown in the literature that menstrual cycle and pregnancy might have apparent effect on CT [2].

Moreover, we wonder about the axial length of the globe, fasting/postprandial statuses, sleeping habits, exercising, smoking, alcohol consumption, and consumption of drinks with/without caffeine before the OCT measurements. We are also curious if the body mass index of the patients and lightening condition of the test room were considered as these parameters can have remarkable impact on CT status [2, 3].

To sum up, local, systemic, and environmental factors must be optimized in studies in which CT is assessed to make the data and statistical results obtained more reliable.

References

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