Author Response: Choroidal Thickness and Axial Length

Our research group thanks Huang and Zhang for their comments about our recent report entitled “Macular choroidal thickness profile in a healthy population measured by swept-source optical coherence tomography.” Axial length (AL), indeed, is one of the key factors influencing choroidal thickness (CT). As stated in Wei et al., the longer the eye, the thinner the choroid. This fact also was described by part of our group in a work carried out by Flores-Moreno et al. about the relationship between highly myopic eyes and CT, finding thinner choroids in highly myopic (and, thus, longer) eyes when compared to the healthy population.

This study was performed using patients' spherical equivalent (SE) instead of AL determinations, since the procedure to obtain them is less invasive and previous data from the literature show that refraction, which is more convenient to obtain, provides equivalent modeling capability as axial length. Furthermore, the patients included present SE between ±3 diopters, which show higher correlation with AL. This, added to the fact that this study analyzes a wide span of ages (from 3–95 years old), which includes young children, with the difficulties their exploration brings, led to the decision of using SE, which seemed more suitable, especially for these cases.

We agree with the recommendation of using AL in our correlations with CT, which would make our report more consistent and we hope our decision to use SE instead is now justified.

Jorge Ruiz-Medranó
Ignacio Flores-Moreno
Pablo Peña-García
Javier A. Montero
Jay S. Duker
José M. Ruiz-Moreno

1 Clínico San Carlos University Hospital, Ophthalmology Unit, Madrid, Spain; 2 Department of Ophthalmology, Castilla La Mancha University, Albacete, Spain; 3 Division of Ophthalmology, Miguel Hernández University, Alicante, Spain; 4 Pío del Río Hortega University Hospital, Ophthalmology Unit, Valladolid, Spain; 5 New England Eye Center, Tufts Medical Center, Boston, Massachusetts, United States; and 6 Alicante Institute of Ophthalmology, VISSUM, Vitreo-Retinal Unit, Alicante, Spain.

E-mail: jorge.ruizmedrano@gmail.com

References


Citation: Invest Ophthalmol Vis Sci. 2014;55:5055. doi:10.1167/iovs.14-15119