








Corneal Epithelial Thickness Correlation with Dry Eye Symptom Severity: A Cross-Sectional Study [Response to Letter]

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Dear editor

It is with great pleasure that we have read the letter from Ning about our paper “Corneal Epithelial Thickness Correlation with Dry Eye Symptom Severity: A Cross-Sectional Study”.^{1,2} We believe this discussion reinforces the importance of our research and pushes us forward. However, we would like to address some points:

The ANTERION is a high-resolution, anterior segment optical coherence tomography (AS-OCT) with a long wavelength of 1300 nm, allowing precise measurements of the anterior segment. Besides, it is equipped with built-in mechanisms that allow for geometric alignment, such as eye tracking on the corneal vertex and automatic quality checks (eye movement, blinking, and surface segmentation). Thus, it seems unlikely that its measurements would be inaccurate.

However, our statistical analysis revealed statistically significant stromal thinning across all rings and zones (in a reverse pattern from the corneal epithelium) – which supports our hypothesis regarding increased epithelial thickness.

As mentioned in the methods section, “all patients underwent examination at a fixed time (9–12 AM), and before instilling eye drops” - which includes any clinical examination (such as Schirmer’s test and fluorescein staining). Besides, every measurement was checked for accuracy, and repeated if needed. Therefore, all possible efforts were made to control for tear film bias.

Our study did not explore inter-eye correlation. Given the impact of ignoring this depends on the strength of its correlation, one cannot fully state that this would compromise independence of data points. Besides, patients with Dry Eye Disease frequently lack symmetry, which supports our approach. However, we acknowledge the importance of your suggestion in further analysis.

Disclosure

The author(s) reported no conflicts of interest in this communication.

References

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