PURPOSE: To evaluate anterior segment parameters in patients with pseudoexfoliation syndrome (PXS) using Scheimpflug imaging.

METHODS: Forty-three PXS patients and 43 healthy control subjects were included in this cross-sectional study. All participants underwent a detailed ophthalmologic examination. Anterior segment parameters were measured using a Scheimpflug system.

RESULTS: Considering the PXS and control groups, the mean corneal thicknesses at the apex point (536 ± 31 and 560 ± 31 µm, respectively, p=0.001), at the center of the pupil (534 ± 31 and 558 ± 33 µm, respectively, p=0.001), and at the thinnest point (528 ± 30 and 546 ± 27 µm, respectively, p=0.005) were significantly thinner in PXS patients. Visual acuity was significantly lower (0.52 ± 0.37 versus 0.88 ± 0.23, p<0.001) and axial length was significantly longer (23.9 ± 0.70 mm versus 23.2 ± 0.90 mm, p=0.001) in the PXS eyes than in the control eyes. There were no statistically significant differences in the mean values of keratometry, anterior chamber angle, anterior chamber depth, corneal volume, and anterior chamber volume between the PXS and control eyes.

CONCLUSIONS: The patients with PXS had thinner corneas, worse visual acuity, and longer axial length compared with those in the healthy controls.