



## ▼ POST GRADUATES ABSTRACTS

### PG - 39: DIURNAL VARIATION IN CENTRAL CORNEAL THICKNESS AND INTRAOCULAR PRESSURE IN PSEUDO EXFOLIATION SYNDROME WITHOUT GLAUCOMA

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**Background:** Pseudoexfoliation syndrome (PXS) is an age related microfibrilopathy characterized by deposition of whitish flaky material over various ocular tissues. PXS is known to have thinner corneas. The purpose of this study was to find if any diurnal variation exists in central corneal thickness (CCT) and intraocular pressure (IOP) in eyes with pseudoexfoliation syndrome (PXS) without glaucoma and the relationship between them.

**Methodology:** Prospective observational study was done on 141 eyes of 85 patients with PXS without glaucoma. CCT and IOP were measured at 4 times in a day by Ultrasonic pachymeter and Goldmann applanation tonometry respectively.

**Results:** There was a significant variation in the CCT and IOP ( $p=0.00$ ) during the day, CCT ranged from  $517.14\pm 36.027$  to  $507.23\pm 36.238$   $\mu\text{m}$  in right eye and  $515.32\pm 34.273$  to  $504.36\pm 35.095$   $\mu\text{m}$  in left eye, IOP ranged from  $14.68\pm 2.458$  to  $13.26\pm 2.356$  mmHg in right eye and  $14.64\pm 2.497$  to  $13.10\pm 2.398$  mmHg in left eye and there was a significant correlation between them ( $p<0.05$ ).

**Conclusion:** A single CCT reading is not adequate to correct the IOP as variation exists in CCT, which could lead to an over or an under estimation of IOP. So for every IOP reading a subsequent CCT should be done and IOP should be corrected based on that.