



## ▼ POST GRADUATES ABSTRACTS

### PG -35 : CORRELATION BETWEEN RETINAL NERVE FIBRE LAYER THICKNESS AND CENTRAL CORNEAL THICKNESS IN OCULAR HYPERTENSION

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**Aim:** To determine correlation between the retinal nerve fibre layer thickness (RNFL) and central corneal thickness (CCT) in patients with ocular hypertension (OHT). **Methodology:** This was a prospective, observational study, done between January 2016 and

June 2017 at a rural tertiary care eye centre. All patients diagnosed with OHT, defined as an intraocular pressure of 21 mm Hg or higher, with normal optic disc and visual field, in the absence of any other ocular disease, were included in the study. Patients with OHT were

sub-divided into thin (CCT  $\leq 555\mu\text{m}$ ) and thick (CCT  $>555\mu\text{m}$ ) corneas. RNFL was measured with spectral domain optical coherence tomography and CCT with ultrasound pachymetry.

**Results:** We examined 65 eyes of 35 OHT patients with a male: female ratio of 3:4. The mean age was  $45.4 \pm 12.21$  years. The mean age in males and females were  $44.47 \pm 10.93$  years and  $44.14 \pm 13.15$  years, respectively, and the difference was not significant (p-value=0.93). The mean intra-ocular pressure (IOP) was  $23.48 \pm 2.47$  mmHg (range: 21 to 30 mm Hg;

95% confidence interval [22.88, 24.08]). The mean CCT was  $553.81 \pm 38.3\mu\text{m}$  and the mean RNFL was  $102.12 \pm 12.28\mu\text{m}$ . Mean RNFL in thin corneas was  $101.14 \pm 10.68\mu\text{m}$  and in thick corneas was  $103.21 \pm 13.92\mu\text{m}$ . There was no significant difference in the average (p-value=0.502) or quadrant-wise (superior, nasal, inferior and temporal) RNFL, between the two groups (p=0.247, 0.882, 0.897, 0.551). Conclusion: There is no correlation between central corneal thickness and retinal nerve fibre layer thickness in patients with ocular hypertension.