ABSTRACT

CORRELATION BETWEEN ALTERATION OF IOP AND ALTERATION OF CENTRAL CORNEAL THICKNESS IN MYOPIA AND ASTIGMATISM MYOPIA PATIENTS BEFORE AND AFTER LASIK (OBSERVATIONAL LONGITUDINAL STUDY)

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Purpose: to analyze correlation between alteration of intraocular pressure (IOP) with alteration of corneal central thickness (CCT) in myopia and astigmatism myopia patients before and after laser in situ keratomileusis (LASIK).

Methods: an observational longitudinal study had been done at Undaan Eye Hospital. Total of 20 eyes of patients that underwent LASIK procedures were included during November 2014 until January 2015. Examination of IOP measured by non contact tonometer. CCT of each eyes measured by ultrasonic pachymeter. Evaluation of IOP and CCT performed before and after LASIK.

Result : the mean IOP before and after LASIK were 14,48 mmHg and 10,55 mmHg respectively. The mean CCT before and after LASIK were 544,84 μ m and 470,45 μ m respectively. The Spearman correlation analysis was used to verified correlation between alteration of IOP and CCT (p = 0,320). The p value more than 0,05 (p > 0,05) was considered statistically no significant.

Conclusion: There is no correlation between IOP and CCT on LASIK cases. The suggestion that the IOP reduction after LASIK should be kept in mind by ophthalmologist to avoid underestimating the IOP level.

Key word: Intraocular pressure, Central corneal thickness, Laser in situ keratomileusis