Detection of early glaucomatous damage in pseudoexfoliation syndrome by assessment of retinal nerve fiber layer

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ABSTRACT

Objective: To compare mean RNFL thickness measured using spectral OCT in the PXS eye without glaucoma with the normal eye RNFL thickness.

Material and methods: We conducted a case control study at Al-Shifa Trust Eye Hospital, Rawalpindi, from June 2013 to March 2014. We included 80 patients; 40 in non-glaucomatous pseudoexfoliation syndrome group and 40 in age matched control group. The RNFL thickness (global average) was assessed using OCT and compared with age matched normal control subjects.

Results: The mean age was 66.75±6.36 years. 36 (45%) were males and 44 (55%) were females. The difference in gender distribution between two groups was statistically insignificant; p=0.653. The BCVA of all participants was at least 0.9, with normal intraocular pressure <20 mmHg, normal CDR of ≤0.3 and no abnormal visual field tests in either group. The global average RNFL thickness of the eyes in PXS group was 105.13±11.53 µm. The global average RNFL thickness of the eyes in Control group was 118.6±15.94 µm; p= 0.05

Conclusion: PXS without glaucoma is associated with a thinner RNFL compared with those of age-matched normal subjects. *Al-Shifa Journal of Ophthalmology 2016; 12(1): 16-21.*