

PREDICTORS OF VISUAL IMPAIRMENT IN PSEUDOEXFOLIATION SYNDROME AND PSEUDOEXFOLIATION GLAUCOMA IN NORTH EAST INDIA- A HOSPITAL BASED STUDY

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ABSTRACT

Purpose: To identify predictors of visual impairment in pseudoexfoliation syndrome (PXF) and exfoliative glaucoma (PXG).

Methods: Retrospective review of records of patients seen by a single clinician at our glaucoma services between April 2011-March 2012. Data collected included age, sex, unilateral or bilateral presentation, baseline intraocular pressure (IOP) and best corrected visual acuity, prior medical consultation or treatment, presence or absence of cataract, cup disc ratio (CDR), gonioscopy, other ocular pathology or systemic associations, mean deviation and pattern standard deviation. Logistic regression was used to identify predictors of poor visual acuity with all the above mentioned variables as independent variables in pseudoexfoliation syndrome and pseudoexfoliation glaucoma.

Results: Of 708 patients seen at the glaucoma services seen by a single clinician, 37 patients with complete available data were included with a mean age of 66 ± 8.5 years (50-80years), including 3 unilateral and 35 bilateral pseudoexfoliation. While 44% of all eyes had a visual acuity better than 20/60, 56% had a visual acuity $< 20/200$. Nine eyes with exfoliative glaucoma were irreversibly blind at presentation. Among those with high IOP, 53% had visual acuity $< 20/200$. Multivariate logistic regression identified baseline IOP, lack of prior treatment and cup disc ratio as predictors for worse visual acuity in PXG with age, lack of prior treatment and cataract as predictors for worse visual acuity in PXF.

Conclusions: While increasing age and cataract predict poor visual acuity in pseudoexfoliation syndrome, a higher baseline IOP and worse cup disc ratio predict poor visual outcomes in exfoliative glaucoma.

KEYWORDS: Pseudoexfoliation syndrome, Exfoliative glaucoma, Blindness.