

Increased likelihood of glaucoma at the same screening intraocular pressure in subjects with pseudoexfoliation: the Thessaloniki Eye Study

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PURPOSE: To compare the clinical characteristics of primary open-angle glaucoma (POAG) and pseudoexfoliative glaucoma (PEXG) identified in the Thessaloniki Eye Study and to evaluate the proportion of subjects with and without pseudoexfoliation (PEX) who have glaucoma by screening intraocular pressure (IOP).

DESIGN: Cross-sectional, population-based study.

METHODS: Randomly selected subjects ≥ 60 years ($n = 2,554$) participated in the Thessaloniki Eye Study. Subjects were classified as having POAG or PEXG according to specific criteria. POAG and PEXG cases were compared for various clinical characteristics. The proportion with glaucoma among subjects with PEX and the proportion with glaucoma among subjects without PEX were estimated by IOP levels.

RESULTS: Among the clinic-visit participants ($n = 2,261$), 94 subjects (4.2%) had POAG and 41 (1.8%) had PEXG. The prevalence of glaucoma among subjects with PEX was 15.2% and the prevalence of glaucoma among subjects without PEX was 4.7%. In subjects without treatment, the mean IOPs were 19.8 mm Hg and 24.3 mm Hg for POAG and PEXG, respectively. For IOP level >20 mm Hg, the proportion with glaucoma among subjects with PEX was higher than that for glaucoma among subjects without PEX (37% vs 15%; $P = .004$), while no statistically significant difference was found for IOP level ≤ 20 mm Hg. **CONCLUSIONS:** In the Thessaloniki Eye Study, for screening IOP ≥ 20 mm Hg, the proportion with glaucoma increased highly in subjects both with and without PEX, while it was much higher among those with PEX at the same screening IOP.

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