

Risk Factors for Rapid Glaucoma Disease Progression

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PURPOSE: To determine the intraocular and systemic risk factor differences between a cohort of rapid glaucoma disease progressors and nonrapid disease progressors.

DESIGN: Retrospective case-control study.

METHODS: Setting: Five private ophthalmology clinics.

STUDY POPULATION: Forty-eight rapidly progressing eyes (progression ≥ 1 dB mean deviation \pm MD/year) and

MAIN OUTCOME MEASURES: Risk factor differences between the cohorts were measured using the independent t test, Wald χ^2 , and binomial regression analysis.

RESULTS: Rapid progressors were older, had significantly lower CCT and baseline IOPs, and were more likely to have pseudoexfoliation, disc haemorrhages, ocular medication changes, and IOP-lowering surgery. They also had significantly higher rates of cardiovascular disease and hypotension. Subjects with cardiovascular disease were 2.33 times more likely to develop rapidly progressive glaucoma disease despite significantly lower mean and baseline IOPs.

CONCLUSION: Cardiovascular disease is an important risk factor for rapid glaucoma disease progression irrespective of IOP control.

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