

Prevalence of Glaucomatous Blindness in Srinagarind Hospital

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Objective: To determine the prevalence of glaucomatous blindness, demography and mechanisms of glaucoma in a referral center.

Design: Retrospective descriptive analysis.

Materials and Methods: Medical records were reviewed between January 1997 and December 2006 in Srinagarind hospital, Khon Kaen University. The diagnosis of glaucoma was based on the presence of at least one of the following criteria: an optic nerve appearance, visual field defect(s), and/or an IOP of 30 mmHg or greater on two or more visits or an IOP of more than 40 mmHg on a single visit. Patients who had other causes of obstruction of visual axis were excluded. Blindness was defined as VA 6/60 or worse ($\leq 20/200$) and/or constriction of visual field of 20° or less on Goldmann perimetry (size III4e) or on Standard Automated Perimetry (SAP), with mean deviation (MD) of -10 or less.

Result: A total of 320 glaucomatous patient records were reviewed. The percentages of angle closure glaucoma, and open angle glaucoma were 63.8%, and 35.6%, respectively. The overall prevalence of blindness was 45% (95% CI 0.39 – 0.50). Prevalence of bilateral blindness and unilateral blindness were 12.5%, (7.8% PACG, 2.5% POAG), and 32.5% (19.1% PACG, 4.7% POAG) respectively. The prevalence of blindness according to the type of glaucoma was highest in secondary angle closure glaucoma (58.6%), followed by PACG (49.4 %), neovascular glaucoma (50%) and secondary open angle glaucoma (40.5 %), respectively.

Conclusions: The prevalence of glaucomatous blindness at Srinagarind hospital was 45%. Angle closure mechanism was the most common cause among glaucomatous blindness.