Lifetime Risk of Blindness in Open-Angle Glaucoma

Peters D, Bengtsson B, Heijl A

Department of Ophthalmology, Lund University, Skåne University Hospital, Malmö, Sweden. Electronic address: dorothea.peters@med.lu.se.

PURPOSE: To determine the lifetime risk and duration of blindness in patients with manifest open-angle glaucoma (OAG).

DESIGN: Retrospective chart review.

METHODS: We studied glaucoma patients who died between January 2006 and June 2010. Most glaucoma patients living in the catchment area (city of Malmö; n = 305 000) are managed at the Department of Ophthalmology at Skåne University Hospital in Malmö. From the patient records we extracted visual field status, visual acuity, and low vision or blindness as defined by the World Health Organization (WHO) criteria and caused by glaucoma at the time of diagnosis and during follow-up. We also noted age at diagnosis and death and when low vision or blindness occurred.

RESULTS: Five hundred and ninety-two patients were included. At the time of the last visit 250 patients (42.2%) had at least 1 blind eye because of glaucoma, while 97 patients (16.4%) were bilaterally blind, and 12 patients (0.5%) had low vision. Median time with a glaucoma diagnosis was 12 years (<1-29), median age when developing bilateral blindness was 86 years, and median duration of bilateral blindness was 2 years (<1-13). The cumulative incidences of blindness in at least 1 eye and bilateral blindness from glaucoma were 26.5% and 5.5%, respectively, after 10 years, and 38.1% and 13.5% at 20 years.

CONCLUSIONS: Approximately 1 out of 6 glaucoma patients was bilaterally blind from glaucoma at the last visit. Median duration of bilateral blindness was 2 years.

Copyright © 2013 The Authors. Published by Elsevier Inc. All rights reserved.
PMID: 23932216