

Vision loss and recovery after trabeculectomy: risk and associated risk factors

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OBJECTIVES: To assess the risk of long-term vision loss after trabeculectomy and to determine the course of long-term vision loss vs transient loss and recovery.

METHODS: The medical records of 301 eyes in 262 patients undergoing trabeculectomy between January 1999 and September 2003 were retrospectively reviewed. Postoperative vision loss was categorized as mild or moderate (decrease in Snellen visual acuity of 3-5 lines) vs severe (decrease of >5 lines) . Postoperative vision loss was considered permanent if visual acuity did not have a return of 3 lines within a 6-month follow-up period.

RESULTS: Permanent vision loss occurred in 24 of 301 eyes (8.0%) : 13 (4.3%) had mild or moderate vision loss, and 11 (3.7%) had severe vision loss. Ten eyes (3.3%) with permanent mild or moderate vision loss and 6 eyes (2.0%) with permanent severe vision loss had no identifiable cause. Significant risk factors for permanent severe unexplained vision loss were preoperative split fixation on visual fields, preoperative number of quadrants with split fixation, and postoperative choroidal effusions with eventual resolution. Transient vision loss occurred in 170 of 301 eyes (56.5%) : 79 (26.2%) had mild or moderate vision loss, with a mean time to recovery of 88 days (range, 6-720 days) , and 91 (30.2%) had severe vision loss, with a mean time to recovery of 78 days (range, 6-720 days) .

CONCLUSIONS: Transient vision loss after trabeculectomy is common and may take up to 2 years for recovery. The risk of permanent vision loss is less common but significant. Two percent of our study population experienced permanent severe unexplained vision loss ("snuff-out") , and risk factors included preoperative split fixation on visual fields, preoperative number of quadrants with split fixation, and postoperative choroidal effusions with eventual resolution.

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