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Removal of retained lens fragments after phacoemulsification reverses secondary glaucoma and restores visual acuity.

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Abstract

PURPOSE: The purpose of the study is to evaluate the effect of vitrectomy on secondary glaucoma and visual acuity outcomes in patients with retained lens fragments after phacoemulsification.

METHODS: A retrospective analysis of 126 patients who had vitrectomy for retained lens fragments after phacoemulsification during the 3-year period between January 1, 1993, and December 31, 1995.

RESULTS: Glaucoma, defined as an intraocular pressure of greater than or equal to 30 mmHg, occurred in 42 (36.8%) of 114 patients before vitrectomy and in 4 patients (3.2%) of 126 after vitrectomy. There were no differences in the rates of persistent glaucoma regardless of the intervals between cataract surgery and the vitrectomy: less than or equal to 1 week, 2 patients (4.1%); greater than 1 week to less than or equal to 4 weeks, 1 patient (2.5%) and greater than 4 weeks, 1 patient (2.6%). The visual acuity was 20/40 or better in 13 patients (11.4%) before vitrectomy and in 75 patients (59.5%) after vitrectomy. The rates of visual acuity 20/40 or better also were similar for all intervals: less than or equal to 1 week, 29 patients (59.2%); greater than 1 week to less than or equal to 4 weeks, 22 patients (56.4%) and greater than 4 weeks, 24 patients (63.1%).

CONCLUSIONS: Vitrectomy for removal of retained lens fragments reduces secondary glaucoma and yields favorable visual acuity outcomes. In eyes with elevated intraocular pressure, early vitrectomy generally is recommended, but delayed vitrectomy also has favorable outcomes.