

Combined Pars Plana Vitrectomy, Phacoemulsification, and Intraocular Lens Implantation for Management of Uveitic Cataract Associated with Posterior Segment Inflammation

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Visual rehabilitation of eyes with chronic uveitis, cataract, and posterior segment inflammation presents a special challenge. The goal of one-stage surgery is to minimize complications inherent to multiple procedures, provide faster visual rehabilitation, and decreased total operating room time and costs. We evaluated the safety and efficacy of combined pars plana vitrectomy, phacoemulsification, and intraocular lens implantation (PPV-CE-IOL) for management of patients with uveitic cataract and posterior segment inflammation.

We studied the long-term visual outcomes, inflammatory activity, and complication rate of PPV-CE-IOL in 31 eyes. The patient age ranged from 15 to 85 years, and the follow-up period was a minimum of 12 months.

RESULTS: Postoperative visual acuity improved in 26 of 31 eyes (84%). Six eyes (19%) with Counting Fingers vision improved to 20/50 or better. Eleven eyes (35%) improved by 4 to 6 lines, and 9 eyes (29%) improved by 1 to 3 lines. Visual acuity remained the same in 2 eyes (6%), and worsened in 3 eyes (10%). Reduction of inflammation by 1 grade or more was observed in 17 eyes (55%). Resolution of preoperative macular edema was seen in 11 of 25 eyes (44%). Intraoperative complications included posterior capsular rupture in 1 eye, and a retinal break in 1 eye. Posterior capsular opacification requiring YAG capsulotomy occurred in 15 eyes (48%). Complications in the postoperative period included glaucoma in 4 eyes, maculopathy in 3 eyes, retinal detachment in 1 eye and phthisis in 1 eye, all of which could be attributed to the underlying uveitis.

CONCLUSION: PPV-CE-IOL is probably an effective and safe procedure which results in more rapid visual rehabilitation in patients with cataract associated with chronic uveitis and associated posterior segment inflammation.