Sutureless Combined 25 Gauge Vitrectomy, Phacoemulsifcation, Posterior Chamber Intraocualr Lens Implantation for Management of Uveitic Cataract Associated with Posterior Segment Pathology

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Advantages:

Sutureless combined 25-gauge total vitrectomy, phacoemulsification and PC-IOL implantation may be a well tolerated surgical technique with an acceptable complication rate in selected uveitis eyes with significant cataract and coexisting posterior segment pathology for restoring useful vision. It offers the patients more rapid and complete visual rehabilitation, with greater convenience, and a lower rate of multiple surgeries.

Methods:
In this study, 19 eyes of 19 patients with uveitis of various etiologies who had posterior segment involvement secondary to chronic uveitis underwent sutureless scleral tunnel incision phacoemulsification combined with total vitrectomy using a 25-gauge instrument and PC-IOL implantation. Other necessary procedures, such as membrane peeling and endolaser photocoagulation, were performed whenever indicated. Outcome measures in this study were visual acuity, course of inflammatory activity, macular edema and complications of surgery.

Effectiveness / Safety:
After a minimum of 12 months of follow-up, visual acuity of 20/100 or better was obtained in 12 eyes (63.2%), and 6 eyes (31.6%) gained visual acuity of 20/40 or better. Decrease in postoperative inflammatory activity of one grade was observed in 8 eyes (42.1%). Preoperatively, only 3 eyes (15.8%) were free of cystoid macular edema (CME). Postoperatively, 7 eyes (36.8%) remained free of CME. Early Postoperative complications included: transient corneal edema in 10 eyes (50.3%), fibrin reaction in 3 eyes (15.8%) and posterior synechiae in 9 eyes (47.3%). Glaucoma was the most common late postoperative complication which was observed in 3 eyes (18.8%). The need for YAG laser capsulotomy was observed in 9 eyes (47.4%) during the first year after surgery.