Visual Improvement Outcome of Pars Plana Vitrectomy Combined Endofragmentation and Secondary IOL Implantation for Dropped Nucleus After Cataract Surgery : A Case Report

Authors: Saut Samuel Simamora

Abstract: PURPOSE: Nucleus drop is one of the most feared and severe complications of modern cataract surgery. The lens material may drop through iatrogenic breaks of the posterior capsule. The incidence of the nucleus as the complication of phacoemulsification increases concomitant to the increased frequency of phacoemulsification. Pars plana vitrectomy (PPV) followed by endofragmentation and secondary intraocular lens (IOL) implantation is the choice of management procedure. This case report aims to present the outcome of PPV for the treatment dropped nucleus after cataract surgery METHODS: A 65 year old female patient came to Vitreoretina department with chief complaints blurry vision in her left eye after phacoemulsification one month before. Ophthalmological examination revealed visual acuity of the right eye (VA RE) was 6/15, and the left eye (VA LE) was hand movement. The intraocular pressure (IOP) on the right eye was 18 mmHg, and on the left eye was 59 mmHg. On her left eye, there were aphakic, dropped lens nucleus and secondary glaucoma.RESULTS: The patient got antiglaucoma agent until her IOP was decreased. She underwent pars plana vitrectomy to remove dropped nucleus and iris fixated IOL. One week post operative evaluation revealed VA LE was 6/7.5 and iris fixated IOL in proper position. CONCLUSIONS: Nucleus drop generally occurs in phacoemulsification cataract surgery techniques. Retained lens nucleus or fragments in the vitreous may cause severe intraocular inflammation leading to secondary glaucoma. The proper and good management for retained lens fragments in nucleus drop give excellent outcome to patient.

Keywords: secondary glaucoma, complication of phacoemulsification, nucleus drop, pars plana vitrectomy **Conference Title:** ICOGT 2024: International Conference on Ophthalmology and Glaucoma Treatments

Conference Location : Singapore, Singapore **Conference Dates :** January 11-12, 2024