



A CLINICAL STUDY ON POOR VISION FOLLOWING CATARACT SURGERY IN ELDERLY PATIENTS

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ABSTRACT **Background:** Cataract surgery is a widely performed procedure to restore vision; however, some elderly patients report poor postoperative outcomes. This study evaluates causes of suboptimal visual recovery following cataract surgery in individuals aged 65 and above. **Methods:** A prospective observational study was conducted at Government General Hospital, Kakinada, from September 2022 to February 2024. One hundred patients aged ≥ 65 years with poor vision post cataract surgery were analyzed. Preoperative, intraoperative, and postoperative factors were assessed through comprehensive ophthalmic evaluation and follow-up. **Results:** The mean age was 69.73 years; 55% were male. SICS with PCIOL was the most commonly performed surgery (78%). Poor vision resulted from postoperative complications in 71% of cases, pre-existing conditions in 23%, and intraoperative complications in 6%. Posterior capsular opacification (34%) and refractive errors (18%) were the leading causes of poor vision at 6 months. Other causes included IOL malposition, uveitis, cystoid macular edema, and pseudophakic bullous keratopathy. **Conclusion:** Postoperative complications remain the most significant contributors to poor visual outcomes. Early identification, proper patient counseling, and meticulous surgical technique can enhance postoperative vision in elderly cataract patients.

KEYWORDS : Cataract surgery, Elderly, Visual impairment, Posterior capsular opacification.

INTRODUCTION

Cataract remains the leading cause of blindness globally, with a disproportionately high burden among the elderly. Although surgical correction offers excellent visual restoration, not all patients achieve optimal outcomes. This study focuses on understanding why some elderly individuals experience poor vision even after uneventful cataract surgery.

MATERIALS AND METHODS

This hospital-based observational study included 100 patients aged ≥ 65 years presenting with suboptimal vision post cataract surgery. Patients underwent a comprehensive ophthalmic evaluation including slit-lamp exam, fundoscopy, IOP measurement, and imaging as required. Surgeries included ECCE, SICS, and Phacoemulsification. Data on complications, comorbidities, and visual acuity were collected and analyzed over a 6–12 month follow-up period.

RESULTS

- Age Distribution: Mean age was 69.7 years; 65% were aged between 65–70 years.
- Gender: Males (55%) slightly outnumbered females (45%).
- Types of Surgery: SICS with PCIOL was most common (78%)
- Type of cataract : Mature cataract (27%) was the most common type, followed by nuclear sclerosis (25%), PSCO (24%), and Hypermature cataract (11%), with traumatic cataracts excluded.

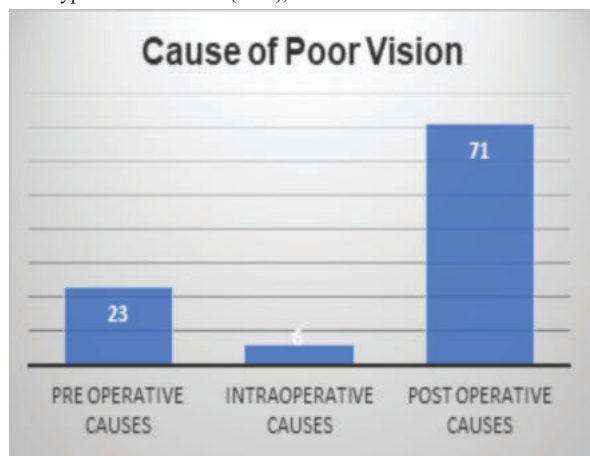


Figure 1: Causes of poor vision following cataract surgery in elderly patients

Pre-existing Ocular Pathologies: ARMD (8%), optic atrophy (5%), PCO (4%), diabetic retinopathy (2%).

- Intraoperative Complications: Zonular dehiscence (3%), posterior capsular tear (2%).
- Postoperative Complications: Striate keratopathy/corneal edema (28%), raised IOP (9%), uveitis (3%).
- Systemic Associations: Diabetes mellitus (48%), hypertension (46%).
- Major causes of poor postoperative vision were: posterior capsular opacification (34%), uncorrected refractive error (18%), IOL malposition (4%), and macular edema (3%). Intraoperative complications included zonular dehiscence (3%) and posterior capsular tear (2%). Pre-existing ocular conditions such as ARMD and optic atrophy accounted for 23% of poor outcomes.

DISCUSSION

The findings highlight that most visual impairment post cataract surgery arises from avoidable or manageable postoperative complications. Elderly patients are more prone to visual compromise post-cataract surgery due to a combination of systemic illnesses and age-related ocular changes. Our study, with a mean age of 69.73 years, aligns with similar studies e.g., SG Pai et al, Skiadaresi et al and shows a male predominance (55%)^[1]. Mature cataract was the most common type, with hypertension and diabetes being the most frequent systemic associations—findings comparable to Sathyan P et al^[2]. Unilateral cataracts were more common (52%) than bilateral (28%). Right eye involvement was slightly higher (58%). Ocular comorbidities were present in 23% of cases, similar to J. Mohammed et al^[3]. Visual outcomes were suboptimal: 53% had borderline vision and 47% had poor vision post-surgery. Compared to J. Mohammed et al, our study had a higher proportion of poor outcomes. Wescott et al and Schein et al have shown reduced success rates in patients over 80, despite adjustment for comorbidities and complications^[4]. Most surgeries in our study were SICS with PCIOL (78%). Phacoemulsification was performed in only 4% of cases, though literature (Thanigasalam T et al) supports lower complication rates with phaco^[5].

Preoperative detection of comorbidities such as ARMD and optic neuropathy is critical. Posterior capsular opacification, though common, is treatable. Preoperative assessment for retinal and optic nerve pathologies is crucial. Regular postoperative assessments help in early identification and management of complications such as PCO and CME. The role of surgeon experience was reflected in higher complication rates during residency-phase procedures. Similar studies corroborate the role of age, systemic illness, and comorbidity in poor surgical outcomes.

CONCLUSION

Cataract surgery in the elderly is effective, but outcomes can be compromised by coexisting ocular pathology or surgical complications. This study highlights the need for personalized cataract surgical planning in elderly patients. A thorough preoperative evaluation including fundus assessment and systemic control, combined with meticulous surgical technique and follow-up, can minimize visual disappointment and enhance outcomes. Awareness, proper counseling, and follow-up are key to improving vision and quality of life post-surgery.

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