



"Study of Incidence and Risk Factors of Posterior Capsular Opacification After Manual Small Incision Cataract Surgery"

KEYWORDS

Posterior capsular opacification , Square/Non- square edge IOL.

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ABSTRACT Posterior capsular opacification is a multifactorial physiological consequence of cataract surgery. Opacification involving the central posterior capsule has a significant impact on high- and low-contrast acuity and low-contrast sensitivity. Hereby, representing the case study of 630 patients who underwent manual small incision cataract surgery in D.Y.Patil Hospital, Kolhapur of which 55 patients developed posterior capsular opacification.

INTRODUCTION

Posterior Capsular Opacification (PCO) is a physiological postoperative consequence of an uneventful uncomplicated extracapsular cataract surgery. PCO referred to as 'Secondary cataract' or 'After cataract', develops over the clear posterior capsule a few months to a few years after an uneventful cataract surgery. PCO results from the growth and abnormal proliferation of lens epithelial cells on the capsule at the time of cataract surgery. These cells migrate to the posterior capsule, where they approach the central visual axis and visual axis obscuration, resulting in dimness of vision. The PCO has two forms, fibrous and pearl. Sometimes, a combination of both is also found.

OBJECTIVES

TO EVALUATE THE INCIDENCE OF POSTERIOR CAPSULAR OPACIFICATION AFTER MANUAL SMALL INCISION CATARACT SURGERY.

TO DETERMINE THE POSTERIOR CAPSULAR OPACIFICATION INCIDENCE AFTER IMPLANTING THE SQUARE/ NON SQUARE EDGE INTRAOCULAR LENS.

INCLUSION CRITERIA

All patients having Posterior Capsular Opacification and V A < 6/24 on Snellens chart, after manual small incision cataract surgery.

EXCLUSION CRITERIA

Patients presenting with any media opacities other than Posterior capsular opacification as result of corneal or vitreous opacities affecting vision.

Patients with Retinal Detachment , Advanced diabetic eye disease , High Myopia. Any other macular disease accounting for visual loss.

Patients who do not co-operate for Slit-Lamp Examination.

Data will be collected using a piloted proforma meeting the objectives of the study after an informed consent of the patient.

Materials And Methods –

Source Of Data – D.Y.Patil Hospital, Kadamwadi, Kolhapur. Ophthalmology Department.

Patients undergone small incision cataract surgery with Posterior capsular intraocular lens implantation developed

posterior capsular opacification(PCO).

Same surgeon has operated all study cases.

(Anterior Capsulotomy , IOL Square edge/ Non- square edge etc. Noted from the operative notes.)

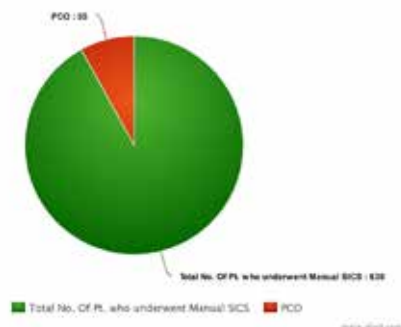
METHODOLOGY

1. Patients to be chosen from inclusion and exclusion criteria.
2. Inform consent from patient.
3. Detailed history to be recorded.
4. General physical examination.
5. Systemic examination.
6. Ocular examination including
 - a) Visual acuity, unaided and aided measured on a snellen's chart.
 - b) Slit lamp biomicroscopy for evaluation of Anterior segment.
 - c) Direct and Indirect Ophthalmoscopy by instilling Tropicamide 0.8% with phenylephrine 5% eyedrops to examine posterior segment.

STUDY REPORT –

Total patients that I have studied who underwent Manual Small Incision Cataract surgery are 630 over a period of 24 months operated by same surgeon, Out of which Patients who developed Posterior capsular opacification are 55.

The 55 patients who developed Posterior capsular opacification of which 52 patients were implanted with Non-Square edge Intraocular lens after manual small incision cataract surgery and 3 patients were implanted with Square edge intraocular lens.



Treatment – YAG Capsulotomy.

Follow up-

Following ND-YAG Laser therapy all patients will be followed up after 4hrs , 1week , 1month and 3 months.

CONCLUSION –

This study have suggested that Posterior capsular opacification is one of the most important complication that occurs after cataract surgery.

My study have suggested that Incidence of Posterior capsular opacification after Manual small incision cataract surgery is 8.73 %

The risk factor of development of posterior capsular opacification is significantly more after implanting Non-square edge Intraocular lens.

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