

Comparative Study of Prednisolone Eye Drops Vs Nepafenac Eye Drops In Post Operative Management of Micro Incision Cataract Surgery

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Abstract

Aims and objectives:-To evaluate the efficacy of nepafenac eye drops and compare with prednisolone eye drops following micro incision cataract surgery.

Results:-It was observed in our study that prednisolone and nepafenac are equal in controlling inflammation but prednisolone has more side effects more than nepafenac. **Conclusion:**-Both topical NSAIDs and steroids have the same efficacy in preventing inflammation and corneal edema. However, patients who received topical steroids were more likely to develop intraocular hypertension and CME.

Keywords:-Inflammation, Intraocular hypertension, Cystoid macular edema, Posterior capsular opacification.

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I. Introduction

Informed consent was taken from all patients. A detailed history of each subject were taken. Both eyes were examined. Visual acuity testing done using snellen chart. Slit lamp examination and fundus examination done. In the study, a total of 100 patients with senile cataract attending to tertiary care hospital for micro incision cataract surgery with PCIOL implantation.

II. Material And Methods

This study was conducted in the Department of ophthalmology, Guntur medical college and Government General Hospital, Guntur.

A total of 100 patients who came to the department of ophthalmology were taken for study.

This study was done for a period of 1 year during June 2018 to may 2019.

This study was done in both hospitalised and follow up patients.

Inclusion criteria:-Cases of old age of both sexes with immature and mature cataract.

Exclusion criteria:- Cases of young age traumatic and other disease related cataract.

III. Results

Comparison of sex between two groups.

SEX	NSAIDS	STEROIDS
Male	28	34
Female	22	16

Comparison of BCVA in between both groups

	NSAIDS	STEROIDS
Week 1	6/18-6/12	6/18-6/12
Week 2	6/12-6/9	6/12-6/9
Week 3	6/12-6/9	6/12-6/9
Week 4	6/9-6/6	6/9-6/6
Week 6	6/9-6/6	6/9-6/6

Comparison of intra ocular pressure in both groups

	NSAIDS	STEROIDS
Day 1	15	15
Week 1	17	17
Week 2	17	18
Week 3	16	19
Week 4	15	20
Week 6	14	18

Comparison of OCT in both groups at 6th week

	NSAIDS	STEROIDS
Macular edema	4	16
Range of macular(um)	267-290	267-350

IV. Discussion:

Surgical trauma to the eye initiates an inflammatory reaction results in the release of prostaglandins and recruitment of neutrophils and macrophages to the site of trauma. Many post operative complications following the ocular inflammation have been reported, including corneal edema, increases IOP, and CME.

In this study, including 100 patients in NSAIDS and steroids group BCVA improved significantly throughout follow up. However, no statistically significant difference observed between both groups in BCVA.

This study shows spike in IOP with steroidal group from 3rd week to end of follow up, with significant statistical difference from NSAID group.

This study shows decrease in post operative inflammation in both groups without any significant statistical difference throughout follow up. Efficacy of drug in both groups were similar. However with topical steroids shows increased macular thickness by the end of 6th week.

V. Conclusion:

Both topical NSAIDS and steroids have the same efficacy in preventing inflammation and corneal edema. However, patients who received topical steroids were more likely to develop intra ocular hypertension and CME.

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