



## Comparison of subconjunctival and intracameral dexamethasone in controlling uveitis post SICS

Sukhanya S

Department of Ophthalmology, Stanley Medical College and Hospital

**Abstract :** To study the effectiveness of Subconjunctival injection of Dexamethasone versus Intracameral injection of Dexamethasone in controlling uveitis post SICS, a prospective study was conducted for a period of twelve months from January to December 2015. In this study 100 patients were studied. Patients who are diagnosed to have senile uncomplicated cataract were divided into two groups. Group A-50 patients received subconjunctival dexamethasone 0.5ml (2mg). Group B-50 patients received intracameral dexamethasone 0.1ml (0.4mg). There was 4-6 percent decrease in the incidence of anterior uveitis after cataract surgery immediately in 1st and 3rd post-operative days in Group B compared to Group A.

**Keyword :** subconjunctival dexamethasone, intracameral dexamethasone

### INTRODUCTION

Cataract surgery is one of the most commonly performed procedure. Although very successful, complications after cataract surgery can prolong patient recovery and increase chance of anterior uveitis. They may delay visual rehabilitation. The most common is *Post-operative inflammation*.

### AIM

To compare the effectiveness of Subconjunctival Dexamethasone 0.5ml (2mg) versus Intracameral injection of Dexamethasone 0.1ml (0.4mg) in controlling immediate postoperative anterior uveitis after cataract surgery.

**DURATION OF STUDY :** Twelve months (January 2015-December 2015)

**STUDY DESIGN :** Prospective case series-analytical study

### METHODOLOGY

**SAMPLE SIZE :** 100 cases

**INCLUSION CRITERIA :**

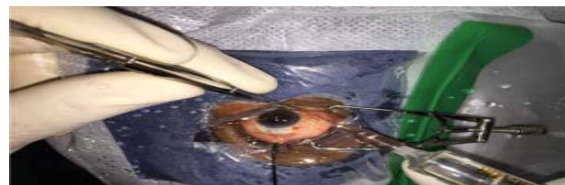
- 1) Patients admitted with senile uncomplicated cataract
- 2) both male and female

**EXCLUSION CRITERIA :**

- 1) Patients with any previous anterior segment surgery
- 2) patients diagnosed as glaucoma

### METHODS

Prospective study was undertaken 100 senile cataract patients planned for conventional Small Incision Cataract Surgery attending the outpatient department of Ophthalmology. Patients who are diagnosed to have senile uncomplicated cataract were admitted as inpatients. They were randomly divided into two groups. Group A - 50 patients received subconjunctival Dexamethasone 0.5ml (2mg) at the end of surgery.



**Group B - 50 patients received intracameral Dexamethasone 0.1ml (0.4mg) at the end of surgery.**



### METHODOLOGY

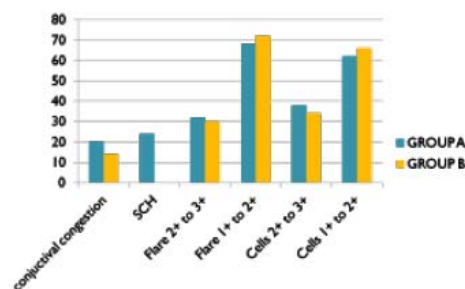
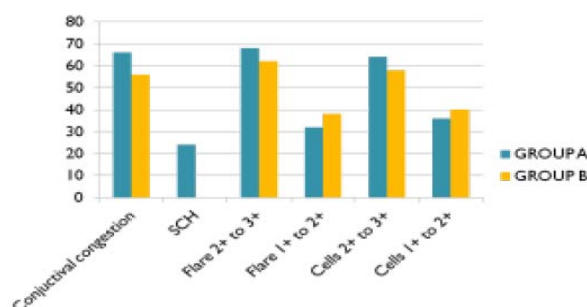
- 1) Pre-operative detailed ophthalmic history
- 2) Refraction
- 3) Slit lamp examination of anterior segment
- 4) IOP by Applanation Tonometry
- 5) Dilated fundus examination
- 6) B-scan wherever necessary was done

All patients underwent conventional Small incision Cataract Surgery with Posterior Chamber Lens Implantation by the same surgeon and were examined on post-operative days 1, 3, 7th day.

## OBSERVATION

### Comparison between Group A and Group B on 1st post-operative day

FEATURES	No. of patients after subconjunctival Dexamethasone n / 50 %	No. of patients after Intracameral dexamethasone n / 50 %
Conjunctival congestion	33 (66%)	28 (56%)
Subconjunctival hemorrhage	12 (24%)	0 (0%)
Flare in AC 2+ to 3+	34 (68%)	31 (62%)
Flare in AC 1+ to 2+	16 (32%)	19 (38%)
Cells in AC 2+ to 3+	32 (64%)	29 (58%)
Cells in AC 1+ to 2+	18 (36%)	21 (42%)



## RESULTS

In this study there was a 4-6% decrease in the incidence of anterior uveitis after cataract surgery immediately in 1st and 3rd post-operative days in GROUP B (received Intracameral Dexamethasone) compared to GROUP A (received Subconjunctival Dexamethasone). The results of the study were similar to Muhammad et al(2009), Intracameral injection of Dexamethasone is an effective alternative to Subconjunctival injection. Also Chaudry et al-Intracameral injection of Dexamethasone is significantly superior to subconjunctival injection until 3rd post-operative day.

## CONCLUSION

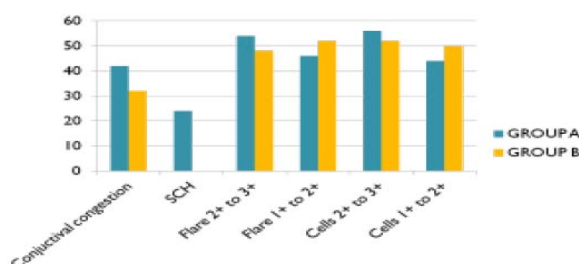
The results of the study showed that Intracameral injection of Dexamethasone is a better alternative to Subconjunctival injection of Dexamethasone. There are certain advantages of intracameral injection i.e drug acts directly in the anterior chamber, the amount of drug is less so risk of side effects like elevation of intra-ocular pressure is less. It also avoids the pain, subconjunctival hemorrhage associated with subconjunctival injection.

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### Comparison between Group A and Group B on 3rd post-operative day

FEATURES	No. of patients after Subconjunctival Dexamethasone n / 50 %	No. of patients after Intracameral Dexamethasone n / 50 %
Conjunctival congestion	21 (42%)	16 (32%)
Subconjunctival hemorrhage	12 (24%)	0 (0%)
Flare in AC 2+ to 3+	27 (54%)	24 (48%)
Flare in AC 1+ to 2+	23 (46%)	26 (52%)
Cells in AC 2+ to 3+	28 (56%)	26 (52%)
Cells in AC 1+ to 2+	22 (44%)	24 (48%)



### Comparison between Group A and Group B on 7th post-operative day

FEATURES	No. of patients after Subconjunctival Dexamethasone n / 50 %	No. of patients after Intracameral Dexamethasone n / 50 %
Conjunctival congestion	10 (20%)	7 (14%)
Subconjunctival hemorrhage	12 (24%)	0 (0%)
Flare in AC 2+ to 3+	16 (32%)	15 (30%)
Flare in AC 1+ to 2+	34 (68%)	35 (70%)
Cells in AC 2+ to 3+	19 (38%)	17 (34%)
Cells in AC 1+ to 2+	31 (62%)	33 (66%)