

# Surgical Management of Cataract with Anterior Uveitis

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**Abstract:** ***Objective:** To study the visual outcome, factors affecting visual recovery, complications encountered during cataract surgery in Anterior Uveitis. **Materials & Methods:** The present study was undertaken in the Department of Ophthalmology, Assam Medical College and Hospital (AMCH), Dibrugarh. The patients reporting to Out Patient Department (OPD) of Ophthalmology department were selected with prefixed criteria. The selected cases after proper preoperative examination and investigation, underwent Cataract Surgery in the Operation Theater (OT) of the department. **Results:** A total of 28 eyes of 28 patients having cataract with anterior uveitis were operated. The male female ratio was 1:1. In the present series, 25 cases (89.20%) were of idiopathic type, while 1 case each was of Ankylosing spondylitis, Fuchs heterochromic iridocyclitis and juvenile Rheumatoid Arthritis. On 1<sup>st</sup> post-operative day, 9 cases (32.1%) developed excessive anterior chamber reaction while the other 19 cases (67.9%) had usual expected anterior chamber reactions. Recurrence of uveitis was most commonly seen in as many as 10 cases, while 8 cases had striate keratopathy, 4 cases developed hyphaema, 3 cases had raised IOP, 2 cases had corneal edema and 1 case of hypopyon 1<sup>st</sup> day after surgery. The best corrected visual acuity of 21 cases were in the range of 6/6 to 6/12, while 4 cases attained BCVA in the range of 6/18 to 6/36. The most common late post-operative complication seen on the 45<sup>th</sup> post-operative seen was pigments over the IOL surface, Posterior synechia was seen in 7 cases, PCO was noted in 5 cases, Vitreous Haze developed in 2 cases and cystoid macular edema was seen in only one case. **Conclusion:** With proper case selection, well planned meticulous surgery and good post-operative management surgical and visual outcome in these cases are quite satisfactory. Both ECCE and SICS with PCIOL implantation are safe procedures in properly selected cases of cataract with anterior uveitis and can give a predictably good visual result.*

**Keywords:** Anterior Uveitis, Cataract, ECCE, SICS

## 1. Introduction

Anterior uveitis is a common ophthalmic disease usually having a chronic course with recurrences, for which long term treatment with corticosteroid in different forms and occasionally with immunosuppressive drugs is required<sup>1</sup>. Cataract formation is a common occurrence in patients with anterior uveitis either as a direct consequence of the disease or as a sequel of long-term corticosteroid use.

Multiple factors have been thought to be related to Cataract formation in uveitis which include –

- Presence of inflammatory mediators.
- Increased lens cell permeability
- Non- Physiologic changes in aqueous or vitreous.
- Decrease in Lens antioxidants.
- Synechiae and membranes interfering with lens metabolism.
- Direct involvement of lens cell by an infectious or toxic agent<sup>2</sup>.

Typically, a posterior subcapsular cataract formation occurs in anterior uveitis along with anterior lens changes, but progression to a pan-cataract is the rule in more advanced stages.

Until about a decade ago, presence of uveitis, active or inactive had been regarded as a contraindication for cataract surgery, particularly with intraocular lens implantation because of unrewarding results. Presently with the development of better surgical techniques, modern intraocular lenses and advances in peri-operative medical

management, cataract surgery in eyes with anterior uveitis has been shown to offer good visual rehabilitation.

Careful evaluation is necessary to ascertain how much the cataract is actually contributing to the visual dysfunction before considering the surgery, since visual loss in uveitis may stem from a variety of other ocular problems such as macular edema or vitritis. As many of the patients having anterior uveitis may have posterior segment diseases, cataract in these patients deny the ophthalmologist the opportunity to visualize the fundus<sup>3</sup>, therefore cataract surgery in those patients is not only to improve the vision but also necessary to permit examination, diagnosis, and treatment of the posterior segment abnormalities. Standard workup for uveitis is essential for all cases to know the type of uveitis so that the surgery can be planned accordingly. Moreover, type of uveitis is one of the factors determining the surgical outcome in these cases. Ultrasonography (B-Scan) is usually required to get the idea about the status of the posterior segment, particularly when there is medial opacity.

Studies have shown that extra -capsular cataract extraction or phacoemulsification with posterior chamber intra-ocular lens implantation effectively improves vision and is well tolerated in many eyes with uveitis, even for long periods<sup>4</sup>, excellent surgical and visual outcome have been reported for eyes with Fuchs heterochromic cyclitis. Cataract surgery in other types of uveitis – including idiopathic uveitis, parsplanitis, and uveitis associated with sarcoidosis, herpes simplex virus, herpes zoster, syphilis, toxoplasmosis, and spondyloarthropathies – can be more problematic, although

Volume 8 Issue 10, October 2019

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surgery in such cases also may yield good results <sup>5</sup>.

Pars plana vitrectomy / lensectomy has been advocated for uveitis associated with Juvenile Rheumatoid Arthritis (JRA), although results have been reported with combined phacoemulsification and vitrectomy. Intraocular lens (IOL) implantation is in general contraindicated in children with JRA -associated iridocyclitis, but IOLs may be successful in selected adults with JRA whose inflammation has been adequately controlled preoperatively.

Extra-capsular cataract extraction and phacoemulsification may be more challenging in uveitic eye than in non- inflamed eyes, and intra-ocular inflammation should be controlled before surgery is considered. It is imperative to eliminate anterior chamber cells and to have the eye quiet without flare- up of inflammation for at least 3 months prior to cataract surgery <sup>6</sup>. Other than having a quiet eye before surgery pre-operative medications are also important aspect in getting a satisfactory surgical outcome. It is advised to start preoperative corticosteroid therapy approximately 1 week before surgery. Oral corticosteroids at the dose of 0.5-1.0 mg/kg per day and hourly topical corticosteroid should be administered preoperatively. This may be tapered after surgery, depending on the postoperative inflammation.

Cataract surgery in the uveitic eye is more challenging than in non uveitic eye. The challenging situations in surgery in uveitic eye include –

- Extensive posterior synechiae – which require synechiolysis.
- Small miotic pupil- which may require different procedures e.g; pupil stretching, use of iris retractors, sphincterectomies.
- Fibrotic anterior capsule- making capsulotomy/ capsulorhexis difficult.
- Weak zonule – making cataract extraction / phacoemulsification and IOL implantation challenging or impossible <sup>7</sup>.

Capsulorhexis should be aimed whenever possible as it has the additional advantage of in the bag IOL implantation. The chances of post-operative inflammation are always more where in the bag IOL implantation is not done.

If logistically possible, phacoemulsification should be the preferred method for nucleus removal, but it can be done by the usual manner. Meticulous cortical clean up is also an important aspect of surgery as residual cortex may also trigger inflammation. The use of Heparin -surface modified intraocular lenses has been advocated as they have been shown to have fewer surface deposits than polymethylmethacrylate (PMMA) lenses for up to 1 year after the surgery. But the frequency of post-operative posterior synechiae formation and cystoid macular edema appears similar with both PMMA and heparin -surface modified lenses. Continuation of preoperative cortico-steroid after the surgery is mandatory in these types of surgeries.

Post operatively cataract surgeries done on uveitic patients should be followed more frequently than the patients without

uveitis. High index of suspicion and aggressive immunosuppressive treatment of these complications optimize short- and long-term visual outcome.

The incidence of posterior capsular opacification is higher in uveitic eyes, leading to earlier use of Neodymium Yttrium -aluminum -garnet (Nd: YAG) laser capsulotomy <sup>8</sup>. In some uveitic conditions such as pars-planitis, inflammatory debris may accumulate and membrane may form on the surface of the IOL, necessitating frequent ND: YAG laser procedures. On occasions, posterior chamber IOLs may have to be removed from these eyes.

In spite of the advances made in techniques and technology in the field of cataract surgery, patients of cataract surgery with anterior uveitis are still a challenge for the ophthalmologist concerned. Good patient selection after proper evaluation, well planned surgery, prompt and proper management of post- operative complications are all of paramount importance for better visual outcome.

## 2. Materials and Methods

**Place of Study:** Department of Ophthalmology, Assam Medical College and Hospital.

**Duration of Study:** 1 year

**Selection of Patient:** Cataract patients with Anterior Uveitis reporting to **O.P.D.** Dept. of Ophthalmology, AMCH were selected for the study with the following inclusion and exclusion criteria:

### Inclusion Criteria

- Any age
- Cataract of all grades.
- Anterior uveitis is either inactive or under control (Anterior chamber cells <1+) with medication for at least 3 months before surgery.

### Exclusion Criteria

- Patients having intermediate or posterior uveitis.
- Anterior uveitis due to infective cause.
- Patients having posterior segment abnormalities.
- Patients with any other ocular disease / abnormalities (e.g. staphyloma) other than cataract and anterior uveitis.

### History

Detailed history of the selected cases was taken regarding the onset, duration, severity, and progression of the present complaints. Particular stress was given on past ocular diseases. When any history of any past ocular illness was present, through history taking was done regarding its number, severity, and the time interval between the episodes, also history was taken on previous ocular medications, if any. History of ocular trauma was specifically asked. The history also included patient's personal history, family history, occupational and socio-economic condition.

### General and Systemic Examination

General and Systemic examination were conducted

accordingly to exclude systemic diseases. Emphasis was given on the examination of the chest and the Musculo-skeletal system.

### Ocular Examination

Visual acuity, both uncorrected and corrected for distant and near were recorded. Examination of ocular adnexa, alignment and ocular movements were done carefully to exclude any adnexal disease and strabismus. The patients were then put for detailed ocular examination under **slit lamp** which included examination of eye lid, lashes, conjunctiva, sclera, cornea, anterior chamber, iris, pupil and lens. While examining the cornea presence of any old or fresh kp were looked for particularly. Great care was taken in examining the anterior chamber for any flare and cells. If present they were graded accordingly, the iris and the pupil were examined cautiously for any previous signs of inflammation like, atrophic patches on the iris, posterior synechia, iris nodule etc. The lens was examined to localize any opacity or opacities and to classify the type of cataract – whether subcapsular, cortical or nuclear. The stage of the cataract was also recorded as immature, mature, or hyper mature. The anterior lens capsule was examined particularly for any iris pigments and synechia when present the position and the extent were noted accordingly.

The **intraocular tension** of both eyes was recorded after estimating them with Schiottz tonometer.

The **examination for the patency of the lacrimal drainage system** was done by doing syringing to rule out dacryocystitis.

The **macular function tests** were performed which included test for Marcus-Gunn pupillary response, two-point discrimination, color vision, photo stress recovery time and entopic visualization.

**Peripheral retinal function** was examined by projecting light in four quadrants and asking the patient to show the direction of the light.

**Fundus examination** was done with both direct and indirect ophthalmoscopy after dilating the pupil by tropicamide and phenylephrine eye drops.

**Gonioscopy** was performed routinely in all the patients to rule out any angle abnormality including angle closure and neovascularization.

The selected patients were put to **laboratory investigations**. Conjunctival swab culture and sensitivity test were done only in cases where superficial infection was suspected. ultrasonography (B Scan) was done in all cases where either the media was hazy or there was total cataract.

### Surgical Procedures

The selected patients were subjected to the following surgical procedures-

- Extra Capsular Cataract Extraction with Posterior Chamber Intraocular Lens Implantation.

- Small Incision Cataract Surgery with Posterior Chamber Intraocular Lens Implantation.

Selection of the surgical procedure was based on the ocular findings.

The patients with the following findings were subjected to **ECCE + PCIOLI**.

- Small non dilating pupil.
- Extensive synechia.
- Pupillary membrane.

Patients with good pupillary dilation even in presence of synechia were subjected to **SICS+ IOLI**.

### Additional Surgical Procedures

The following additional steps/procedures were done in some special situations like, synechia not broken even after mydriasis, small non dilating pupil, membranes over the pupillary aperture etc.

**Synechiolysis:** The procedure was done in cases of single or multiple discrete synechia(s) which was /were not broken after instillation of mydriatic drops. The procedure was done both in **ECCE + PCIOLI** and **SICS + PCIOLI**, to do this procedure a flat blunt tipped iris repositor was introduced under the free margin of the pupil and then was swiped over the anterior lens capsule to break the adhesion. Care was taken not to injure the lens or the anterior lens capsule during insertion of the instrument or during sweeping.

**Sphincterectomy:** The procedure was performed when there was a small pupil that could not be dilated satisfactorily by pharmacological means. A Vannus scissor was used to cut the sphincter pupillae. Multiple cuts all along the pupillary margin was required to get a bigger pupil.

**Complete Iridectomy:** This procedure was done sometimes in presence of small non dilating pupil. With the help of an iris forceps the superior peripheral part of the iris was grasped and then with a De Weckers iris scissors the iris was cut from the pupillary margin to the periphery.

**Pupillary Stretching:** The procedure was tried in small non dilating pupil. For this procedure to perform two Y pushers were employed. After inserting them into the anterior chamber the pupillary margin was engaged in two different sites and then they were pushed in opposite directions. The procedure was repeated in two other sites to get maximum dilation.

**Membranectomy:** This procedure was done when there was exudative membrane over the pupillary aperture. A nick on the membrane was made by the cystitome and then with the help of Vannus scissor membrane was cut to free the pupillary aperture.

### Preoperative Medication

- Topical antibiotic and corticosteroid eye drop one drop 6 hourly on the eye to be operated starting 3 days prior to the surgery.

- Oral prednisolone at the dose of 1mg/kg of body weight starting 3 days prior to the surgery.
- Tropicamide and phenylephrine eye drop -one drop at 15minute interval half an hour prior to the surgery.
- Topical Flurbiprofen eye drop – one drop 8 hourly 3 days prior to the surgery.

### Type of Anaesthesia

Both the surgical procedures were performed under Local infiltrative Peribulbar Anesthesia. After topical anesthesia with 4% lignocaine or 2% proparacaine eye drop two peribulbar injections of 3 ml each were given one in each lid.

The anesthetic fluid is prepared by mixing 1.5 ml of 2% lignocaine (with Adrenaline and Hyaluronidase) with a 1.5 ml of 5% Bupivacaine. The injection in the upper lid was given in the junction between the lateral 2/3<sup>rd</sup> and the medial 1/3<sup>rd</sup> while in the lower lid it was injected at the junction between the lateral 1/3<sup>rd</sup> and the medial 2/3<sup>rd</sup>.

### Post- Operative Management:

On completion of the surgery the patient was given pad and bandage on the operated eye after application of antibiotic eye drop. Restriction of movement was not done and the patient was allowed to take normal diet. Post-operative medication included-

Inj. Diclofenac: 1amp im stat.

Tab. Ciprofloxacin 500 mg: one tab 12 hourly x 5 days

Cap. B complex: one cap. Daily after food

Oral prednisolone was continued.

### Post Operative Checkup

Routinely post- operative checkup was done on Day 1, day 7 and day 45. The cases showing excessive anterior chamber reactions were checked on daily till resolution of the reaction.

### Post- operative checkup on day 1:

On the 1<sup>st</sup> post -operative day the operated eye was examined properly under slit lamp and the examination findings were recorded. Particular care was taken to examine the anterior chamber reaction. The intensity of the cellular reaction in the anterior chamber was graded according to the number of **inflammatory cells** seen in a 1x3 mm high powered beam at full intensity at a 450-600 angle. The aqueous cells were graded according to the grading given below <sup>9</sup>:

The **flare** was seen by throwing a short 2 mm full intensity beam in an oblique angle to the plane of the iris, so that the obscuring of iris details was used as a measurement of flare. The aqueous flare was graded according to the grading method of Hogan et al <sup>10</sup>.

Grade	Nos. of Cells/ Field
0	No Cells
trace	< 5 cells
1+	5-10 cells
2+	10-20 cells
3+	20 -30 cells
4+	cells too numerous to count

After the examination of the aqueous flare and cells the anterior chamber reaction of the cases were categorized according to the following guidelines:

**Excessive:** When the anterior chamber cells are more than 2+ or there is presence of fibrinous membrane.

**Usual Expected:** When the anterior chamber cells are 2+ or <2+.

After examining the other details of the anterior segment including the **IOL** and recording the pinhole vision of the operated eye, the pupil was dilated with Tropicamide and Phenylephrine eye drops and fundus was examined both by direct and indirect ophthalmoscopy.

Grade	Description
0	Complete absence
1+	Faint flare (Barely visible)
2+	Moderate flare (iris and lens details are clear)
3+	Marked flare (iris and lens details are hazy)
4+	Intense flare (fixed coagulated aqueous Humour with considerable fibrin)

The intra-ocular pressure was examined digitally and any other early post-operative complications was recorded. Topical antibiotic and steroid eye drops were given at 1 hourly interval from day 1. Topical cycloplegics like atropine / cyclopentolate eye drops were added on Day 1. Any complications noted on day 1 was treated accordingly.

### Post- operative checkup on day 7:

The patient's pinhole vision on the operated eye was recorded. On the slit lamp the anterior segment was examined properly and any change in findings of day 1 was recorded. The intraocular tension was recorded using Schiotz tonometry. The posterior segment was examined by doing direct and indirect ophthalmoscopy after dilating the pupil with tropicamide and phenylephrine eye drops. The patient was discharged if the eye was quiet and without any complications.

### Post- operative checkup on day 45:

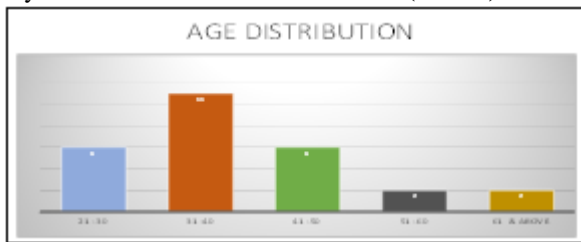
The patient was again examined and the uncorrected visual acuity (**UCVA**) was recorded. After doing retinoscopy the glasses were prescribed and the best corrected visual acuity was recorded. Slit lamp examination was done and the anterior segment findings was noted including the status of IOL. The posterior segment evaluation was done. Any other complication was noted.

## 3. Results and Observations

In the present study conducted in the Department of Ophthalmology, Assam Medical College & Hospital, Dibrugarh a total of 28 Eyes of 28 patients having cataract with anterior uveitis were operated and their results and observations are being described below:

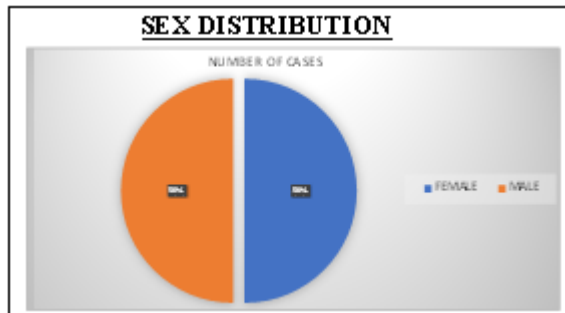
### a) Age Distribution

The disease was seen most commonly in the age group of 31 – 40 years which accounted for 11 cases (39.4%).



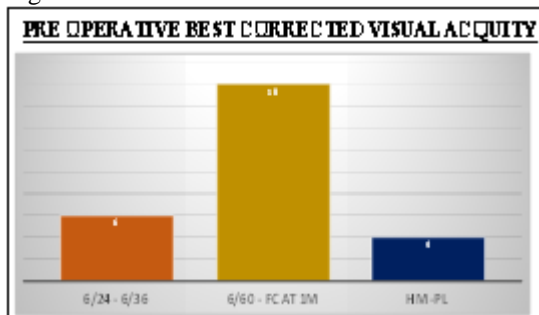
**b) Sex Distribution**

Out of 28 cases, 14 were males and 14 were females. The male female ratio was 1:1



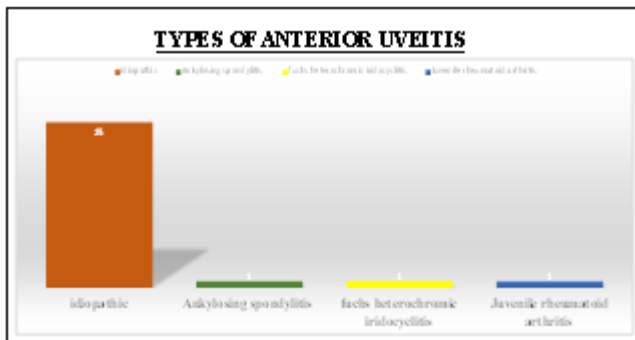
**c) Pre-Operative Best Corrected Visual Acuity (BCVA):**

18 cases (64.3%) had BCVA in the range of 6/60 – finger counting at 1m.

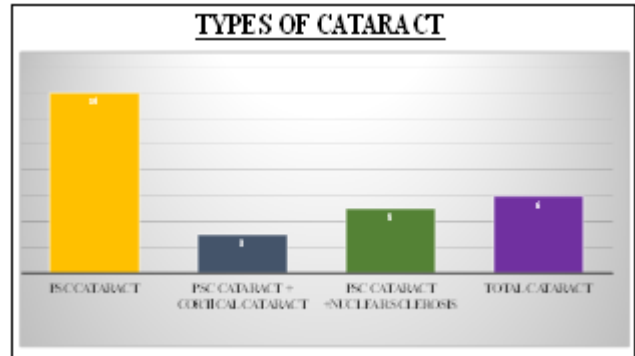


**d) Types Of Anterior Uveitis**

In the present series, 25 cases (89.20%) were of idiopathic type, while 1 case each was of Ankylosing spondylitis, Fuchs heterochromic iridocyclitis and juvenile Rheumatoid Arthritis.



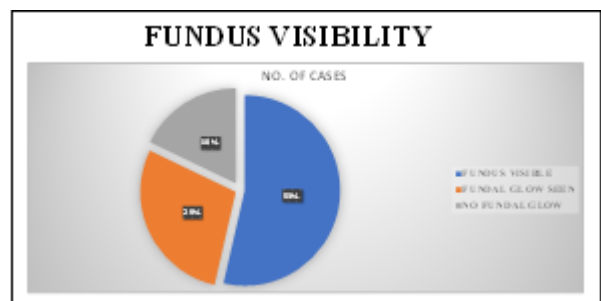
**e) Types of Cataract**



Out of 28 cases majority of the cases had posterior subcapsular cataract (PSC) (14 cases= 50 %)

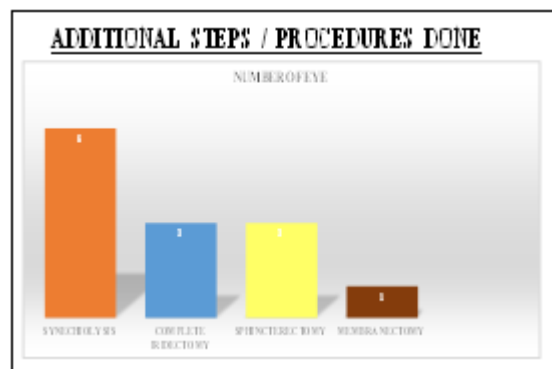
**f) Fundus Visibility**

In the present series, when the fundus was examined by indirect ophthalmoscope under mydriasis, in 15 cases (53.5%) were visible.



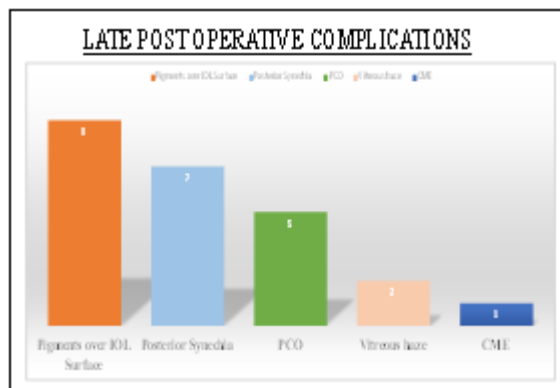
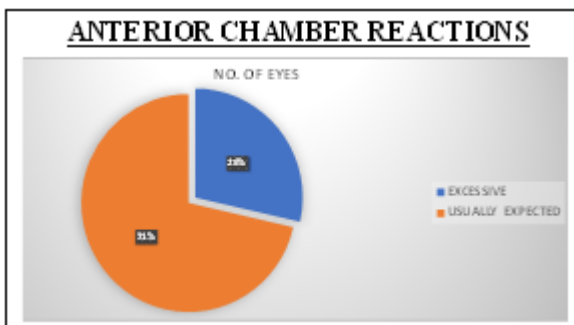
**g) Additional Procedures / Procedures Done:**

Five additional steps/ procedures where **synechiolysis** was the most commonly employed in 6 cases, while **complete iridectomy** and **sphincterectomy** were done in 3 cases only. **Pupillary stretching** was done in 2 cases and **membranectomy** was done in 1 case.



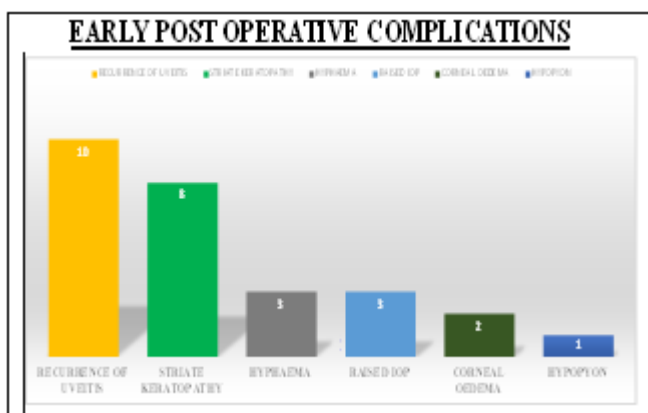
**h) Anterior Chamber Reactions On Post Operative Day 1:**

On 1<sup>st</sup> post-operative day, 9 cases (32.1%) developed excessive anterior chamber reaction while the other 19 cases (67.9%) had usual expected anterior chamber reactions.



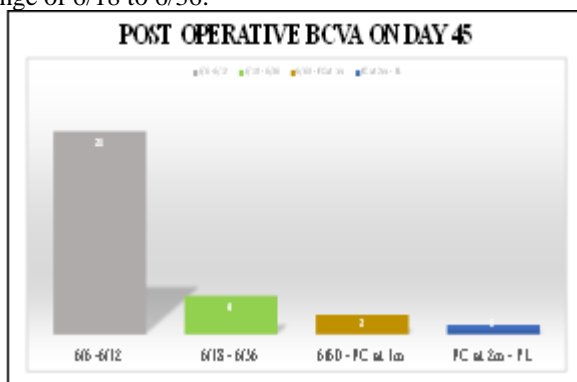
**i) Early Postoperative Complications:**

Various post-operative complications were noted on the 1<sup>st</sup> post-operative day. Recurrence of uveitis was the most commonly seen in as many as 10 cases, while 8 cases had striate keratopathy, 4 cases developed hyphaema, 3 cases had raised IOP, 2 cases had corneal edema and 1 case of hypopyon.



**j) Post-Operative BCVA on day 45:**

The best corrected visual acuity of 21 cases were in the range of 6/6 to 6/12, while 4 cases attained BCVA in the range of 6/18 to 6/36.



**k) Late Post Operative Complications**

In the present study, the most common late post-operative complication seen on the 45<sup>th</sup> post-operative seen was pigments over the IOL surface. **Posterior synechia** was seen in 7 cases, **PCO** was noted in 5 cases, **Vitreous Haze** developed in 2 cases and **cystoid macular edema** was seen in only one case.

**4. Discussion**

Surgery of cataract with anterior uveitis has seen tremendous changes in the last two decades, and its safety and benefits have been proved conclusively by different workers. Though in the past surgery was avoided in patients having cataract with anterior uveitis because of its attendant complications and unrewarding outcome, now a days due to newer techniques and technology fewer complications are encountered and visual outcome are very satisfactory That is why now-a-days surgery in cataract with anterior uveitis is done routinely. It is obvious that the surgery in such cases demands precautionary measures.

In the present series, 28 eyes having cataract with anterior uveitis were studied for their post-surgical outcome. The study was done to know the factors affecting the visual recovery in these cases, also the complications encountered during and after surgery were studied.

The results of our study showed that 25 eye (89.3%) had visual improvement over the pre-operative best corrected visual acuity in the study done in 1992 by **Daus et al**<sup>11</sup> there was visual improvement of 57 of the 63 eyes (90.50%) operated for cataract with uveitis. In the study done by **Krishna R et al**<sup>12</sup> 94% of the total 36 eyes who had underwent ECCE and PCIOL implantation had visual acuity improvement compared with pre-operative levels. In the study done by **Chung YM et al**<sup>13</sup> post-operative visual acuity in all eyes was better than it was preoperatively, although further procedures were required in some eyes: a pars plana vitrectomy in one, a surgical peripheral iridectomy in one and Nd: YAG laser capsulotomy in 10.

In the present series, 15 eyes (53.50%) of the 28 cases attained best corrected visual acuity of 6/9 or more. In the study done by **Foster CS et al**<sup>14</sup> (87%) of the 32 eyes where extracapsular extraction and intraocular lens implantation was done achieved a stable visual acuity of 6/9 or better. In the study done by **Estafanous MF et al**<sup>15</sup> in 2001 the final visual acuity better than or equal to 6/9 was in 87% of the thirty-four eyes who underwent phacoemulsification with PCIOL implantation for cataract with uveitis achieved a best corrected visual acuity of 6/9 or better.

Out of 28 eyes managed surgically for cataract with anterior uveitis in present study, 25 eyes were of idiopathic type,

while rest 3 eyes were having ankylosing spondylitis, Fuchs heterochromic iridocyclitis and Juvenile Rheumatoid Arthritis (1 each). In the series of Harada et al<sup>16</sup> the etiological diagnosis of the uveitis included 8 cases of Sarcoidosis, 5 cases of Bechet's, 3 cases of Vogt-Kayanagi-Harada syndrome and 12 cases of idiopathic etiology.

Nghiem- Buffet MH et al<sup>17</sup> found 3 cases of Fuchs heterochromic iridocyclitis, 1 case of Ankylosing Spondylitis, 2 cases of Sarcoidosis, 1 case of Toxoplasmosis and 1 case of Birdshot chorioretinopathy.

In the present study Early Complications encountered were – Recurrence of uveitis (10 cases), striate keratopathy (8 cases), hyphaema (3 cases), raised IOP (3 cases), corneal edema (2 cases) and hypopyon (1 case). The late complications include – pigments over IOL surface (9 cases), posterior synechia (7 cases), vitreous haze (2 cases) and cystoid macular edema (1 case).

Foster RE et al<sup>18</sup> found the following complications in their study- recurrence of uveitis in 20 eyes (51.3%) and post-operative cystoid macular edema in 18 eyes (46.20%), and in both the cases the complications either resolved or improved with conservative managements.

In a study done by Akova YA et al<sup>19</sup> the post-operative complications encountered were chronic posterior uveitis, cystoid macular edema, epiretinal membrane and glaucomatous optic nerve damage.

Turno-Krecicka A et al<sup>20</sup> found in their study done in 2000 on 18 cases of cataract with different types of uveitis that the reasons for lower visual acuity were – cystoid macular edema in 6 cases (33%), band keratopathy, amblyopia and floaters in the vitreous.

The main complications encountered in the study carried out by Hazari et al<sup>21</sup> (2002) were: persistent uveitis (23.88%), cystoid macular edema (20.89%), posterior capsular opacification (14.92%) and vitreous opacification (10.44%).

The most common complications encountered by different workers in different studies done on patients of cataract with uveitis were –

- Posterior capsular opacification
- Recurrence of uveitis
- Cystoid macular edema

## 5. Conclusions

From the present study of 28 cases of cataract with anterior uveitis who had underwent cataract surgery with posterior chamber intraocular lens implantation, the following conclusions can be drawn:

- Cataract with anterior uveitis is more prevalent in the age group of 31-40 years.
- Both sexes are almost equally affected.
- A thorough History and preoperative work up of the patients are of utmost importance not only to plan the surgery but also to avoid complications.

- Under no circumstance's surgery should be planned when the anterior uveitis is active. Rather there should be a pre-operative control of inflammation for at least a period of 3 months.
- It is important to rule out any associated posterior segment disease or abnormality particularly when fundus is not visible due to hazy media.
- Proper case selection is also a key factor for satisfactory surgical outcome.
- Careful planning of the surgery is very much essential as the situations in each eye may be different.
- Preoperative anti-inflammatory medication in the form of topical and oral steroid though not mandatory, is always helpful.
- Least tissue handling, particularly of the iris should be done in every steps of the surgery.
- Post-operatively the patients should be followed up regularly and at reasonably frequent interval so as to act immediately in case of any flare up of uveitis.
- With proper case selection, well planned meticulous surgery and good post-operative management surgical and visual outcome in these cases are quite satisfactory.
- Both ECCE and SICS with PCIOL implantation are safe procedures in properly selected cases of cataract with anterior uveitis and can give a predictably good visual result.

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