World Journal of Pharmaceutical and Life Sciences

www.wjpls.org

Impact Factor: 8.21 Coden USA: WJPLA7

TO STUDY THE CAUSES, INTRAOPERATIVE AND POSTOPERATIVE COMPLICATIONS, AND VISUAL OUTCOMES IN PATIENTS WITH POST-UVEITIC CATARACT

***Dr. Jaishree Dwivedi, Dr. Sudha Singh, Dr. Alka Gupta, Dr. Lokesh Kumar Singh**

India.

***Corresponding Author: Dr. Jaishree Dwivedi**

India.

DOI: https://doi.org/10.5281/zenodo.21787908

How to cite this Article: *Dr. Jaishree Dwivedi, Dr. Sudha Singh, Dr. Alka Gupta, Dr. Lokesh Kumar Singh. (2026). TO Study The Causes, Intraoperative And Postoperative Complications, And Visual Outcomes In Patients With Post-Uveitic Cataract. World Journal of Pharmaceutical and Life Science, 12(8), 149-152.

Article Received on 05/07/2026 **Article Revised on 25/07/2026** **Article Published on 01/08/2026**

ABSTRACT

Objective: To study the causes, intraoperative and postoperative complications, and visual outcomes in patients with post-uveitic cataract. **Methods:** A prospective study was conducted on patients diagnosed with uveitic cataract. The etiology of uveitis, preoperative inflammation control, surgical techniques, intraoperative challenges, and postoperative complications were analyzed. Best-corrected visual acuity (BCVA) was assessed preoperatively and at follow-up visits to determine visual outcomes. **Results:** Common causes of uveitic cataract included chronic anterior uveitis, intermediate uveitis, and posterior uveitis, with infections and autoimmune disorders being major contributors. Intraoperative complications such as posterior synechiae, zonular weakness, and posterior capsule rupture were noted. Postoperatively, complications like cystoid macular edema, posterior capsular opacification, and recurrence of inflammation impacted visual recovery. Despite these challenges, most patients achieved significant visual improvement with appropriate perioperative management. **Conclusion:** Uveitic cataract surgery is complex due to pre-existing inflammation and structural changes. A meticulous surgical approach, effective perioperative inflammation control, and long-term monitoring are essential to optimize visual outcomes and minimize complications.

KEYWORDS

1. UVEITIS
2. SYSTEMIC
3. CILIARY BODY
4. CHRONIC
5. IRIS
6. BCVA

INTRODUCTION

Cataract development is frequently observed as a complication arising from chronic or recurrent uveitis, attributed to prolonged intraocular inflammation and the extended use of systemic and/or topical corticosteroid therapy.[1]

Uveitis, characterized by inflammation of the uveal tract and adjacent intraocular structures, the iris, ciliary body, and choroid. This inflammation may manifest as either an acute or chronic condition, occurring unilaterally or bilaterally, and in approximately 50% of cases, the precise cause remains presumption of an autoimmune origin.[2]

The classification of uveitis is primarily anatomical, offering insights into the affected stmatures, such as anterior uveitis (iritis) involving the iris,[3] intermediate uveitis marked by inflammation of the ciliary body, peripheral retina, and vitreous base, posterior uveitis centered on inflammation of the choroid and retina, and pan-uveitis characterized by inflammation affecting the

entire uveal tract. Uveitis can arise from diverse etiological factors, including autoimmune processes, infectious agents, neoplastic syndromes, and traumatic or postoperative events.[4]

Uveitis is characterized by inflammation of the uvea, which consists of the iris, ciliary body, and choroid. The symptoms and signs vary depending on the specific type of uveitis.

MATERIAL AND METHODS

A prospective cohort study was conducted at the OPD of the upgraded Department of Ophthalmology at LLRM Medical College, Meerut. A total of 40 patients with uveitic cataracts were selected from the routine OPD over the period of one year.

A detailed history and a thorough clinical and complele ophthahnic examination were done. The selection of patients were done on the basis of following criteria.

Inclusion criteria

- Ability to give consent.
- Known cases of anterior, intermediate, posterior uveitis.
- Planned clear uveitic cataract extraction and placement of IOL for visually significant cataracts.
- Intraocular inflammation should be controlled for a period of 3 months.
- No active inflammatory sign.

Exclusion Criteria

- Previous intraocular surgery.
- Patients having any other ocular morbidity or disease such as dry eye disease, corneal dystrophies, degenerations, opacities glaucoma, diabetic or hypertensive retinopathy, age-related macular degeneration, etc.
- Patients with a history of trauma.

Evaluation of the patients

A detailed history regarding the personal bio-data, presenting ocular and systemic complaints, if any, had been taken from patients. The eyes should be quiescent for a minimum of three months before surgery.

Pre op medication- All patients were started on topical antibiotic steroid one week before the surgery. Strong mydriatics like 1% atropine eye ointment or 2% homatropine were used for full pupillary dilation.

Informed consent- a written consent was taken from the patients after giving a detailed information of uveitic cataract, its mode of surgical treatment, potential complications and visual prognosis.

All the cases were operated on under regional anaesthesia, such as a peribulbar block given to patients' comfort to avoid pain during the surgery.

Out of 40 patients 20 were planned for small incision cataract surgery and 20 for phacoemulsification with PCIOL implantation.

A comprehensive examination was performed during the follow-up to check for fundus evaluation, anterior chamber reaction, and vision improvement.

OBSERVATIONS AND RESULTS

The present study entailed 40 patients of uveitic cataract who attended the ophthalmic outpatient department of LLRM medical college, Meerut, during the period of one year.

Table 1: Distribution of patients according to their ctiological factor of uveitic cataract.

Etiological facter	New of cases	Percentage
IDIOPATHIC	26	65.0
RHEUMATOID ARTHRITIS	6	15.0
ANKYLOSING SPONDYLITIS	2	5.0
FUCHS HETEROCHROMIC IRIDOCYCLITIS	2	5.0
TB CHORIORETINITIS	2	5.0
TOXO CHORIORETINITIS	1	2.50
SARCOIDOSIS	1	2.50
TOTAL	40	100

Most cases (65%) were due to unknown reasons (idiopathic). Other causes included rheumatoid arthritis (15%), ankylosing spondylitis (5%), Fuchs heterochromic iridocyclitis (5%), TB chorioretinitis (5%). toxo chorioretinitis (2.5%), and sarcoidosis (2.5%).

Table 2: Distribution bleeding of participants according to Tntra-operative Complications during cataract surgery (multiple response)

COMPLICATION	FREQUENCY	PERCENTAGE
EXCESSIVE CONJUNCTIVAL	9	22.5
POSTERIOR SYNECHIAE	24	85.0
OROS B;EEDOMG	4	10.0
POSTERIOR CAPSULE RENT	3	7.5
IRIS PIGENT DISPERSION	7	17.5
ZONULAR DIAL YSIS	3	7.5

Excessive Conjunctival Bleeding: 9 cases, accounting for 22.5%. Posterior Synechlae: 24 cases, representing 85.0%. Iris Bleeding: 4 cases, making up 10.0%. Posterior Capsule Rent: 3 cases, accounting for 7.5%. Iris Pigment Dispersion: 7 cases, representing 17.5%. Zonular Dialysis: 3 cases, making up 7,5%.

Table 3: Distribution of participants according to early postoperative complications in uveitic cataract surgery (multiple responses).

COMPLICATION	FREQUENCY	PERCENTAGE
AC REACTION (ANTERIOR CHAMBER REACTION	24	60.0
STRIATE KERATITIS	10	25.0
HYPHAEMA	2	5.0
PIGMNET OVER LENS	11	27.5
MACULAR EDEMA	8	20.0

AC REACTION (Anterior Chamber Reaction): 24 cases, accounting for 60.0%. STRIATE KERATITIS: 10 cases, representing 25.0%. HYPHAEMA: 2 cases, making up 5.0%. PIGMENT OVER LENS: 11 cases, accounting for 27.5%. MACULAR EDEMA: 8 cases, representing 20.0%.

Table 4: Distribution of participants according to Late post-operative complication in uveitic cataract surgery (multiple responses).

COMPLICATION	FREQUENCY	PERCENTAGE
POSTERIOR SYNECHIAE	12	25
PCO (POSTERIOR CAPSULAR OPACIFICATION)	15	45.0
CME (CYSTOID MACULAR EDEMA)	11	27.5
PUPILLARY CAPTURE	4	10.0
PUPILLARY MEMBERANE	5	12.5

Posterior synechiae in 25%, PCO in 45%, CME in 27.5%, papillary capture in 10%, and papillary memberane in 12.5% of the cases.

Table 5: Distribution of participants according to visual acuity at the end of 6 weeks after uveitic cataract surgery.

VISUAL ACUITY AT THE END OF 6 WEES	NUMBER OF PATIENTS	PERCENTAGE
6/6-6/12	15	36.6
6/18-6/24	12	30.0
6/36-6/60	8	20.0
<6/60	5	13.3
FCCF, HM, PL, PR POSITIVE	0	0
TOTAL	40	100

A significant portion, about 36.6%, achieved excellent vision (6/6-6/12), while 30.0% attained good vision (6/18-6/24). A smaller percentage, 20.0%, had moderate vision (6/36-6/60), and 13.3% still had poorer vision (<6/60).

CONCLUSION

The present study was conducted in the OPD of the upgraded department of ophthalmology at LLRM Medical College, Meerut, to study the causes, intra-operative, post-operative complications and visual outcomes in cases of post-uveitic cataracts.

Cataract development is a widespread occurrence in any form of anterior, intermediate and posterior uveitis because of chronic intraocular inflammation, frequent relapse and long-term use of corticosteroids.

Over a year, 40 patients participated in the study-

Etiological Elements-The most common cause (65%) was idiopathic uveitis, which was followed by rheumatoid arthritis (15%) and other conditions such toxo-chorioretinitis and sarcoidosis were less involved 1% of each.

In Surgery, 50% of respondents favoured phacoemulsification with a posterior chamber intraocular lens (PC1OL), and 50% selected small incision cataract surgery (S1CS).

Two of the most common intraoperative problems were excessive conjunctiva! bleeding (22.5%) and posterior synechiae (85%) were present. In other complications, posterior chamber rent and zonular dialysis were seen in 3% of each group.

Anterior Chamber Reaction (60%) and Pigment Over Lens (27.5%) were. frequent early post-operative complications followed by striate keratitis (25%), macular oedema (20%), and hyphema.

Cystoid Macular Edema (27.5%) and Posterior Capsular Opacification (45%) were the late consequences, most common at six weeks. More than one complications were reported in a single patient.

Most had low vision prior to Surgery; 32.5% had it at Hand Movement, 37.5% had it between 6/36 and 6/60, and 7% had visual acuity between PL Positive and PR accurate.

36.6% of patients had 6/6-6/12 vision six weeks after Surgery, showing a considerable improvement in visual acuity. As time progressed, the vision improved after resolving some complications, but still, some patients were noted to have less visual acuity due to posterior capsular opacification and cystoid macular oedema.

A pre-operative anti-inflammatory regimen must be carefully planned for each patient, The study highlights the middle-aged adult age group, male patient preponderance, and several etiological factors contributing to uveitic cataracts. Despite frequent intra- and post-operative problems, the overall surgical results were positive, with noticeable increases in visual acuity following the procedure.

REFERENCES

1. Thome JE. woreta FA, dunn JP, jans DA. Risk of cataract development among children with juvenile idiopathic arthritis- related uveitis treated with topical steroid, opthalmolgy, 2010; 117: 1436-41.
2. Hooper PL Rao NA. Smith RE. Cataract extraction in uveitis patient. survey of ophthalmology, 1990; 35: 120-44.
3. Durrani OM, Tehrani NN. Marr JE. moradi P, Stavoru P, Murray PI. degrre duration, and cause of visual loss in uveitis . Br j ophthalmol., 2004; 88: 1159-62.
4. Rojas B, zafirais P.foster CS. Cataract surgery in patients with uveitis. Curr opin Ophthalmol., 1997; 8: 6-I2.