



## UVEITIC CATARACT AND ITS MANAGEMENT

### Ophthalmology

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### ABSTRACT

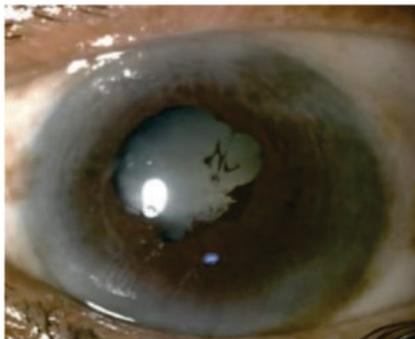
A cataract is an opacification of the eye's crystalline lens that prevents the light rays from reaching the retina, leading to a visual impairment that significantly affects the patient's quality of life. A complicated cataract refers to the opacification of the crystalline lens secondary to intraocular diseases, mainly intraocular inflammatory conditions that include anterior, intermediate, or posterior uveitis. However, other intraocular conditions have also been identified that lead to the development of complicated cataracts. It is especially disabling in the younger age group because of the visual impairment and need for cataract surgery with its own complications [1]. The cataract begins as a posterior subcapsular cataract mainly [2]. Other various intraocular conditions leading to complicated cataracts are: a) Degenerative conditions include Retinitis Pigmentosa. The development of cataract is the most common complication of retinitis pigmentosa in the anterior segment [3] b) Retinal detachment c) Glaucoma- Primary or secondary glaucoma. Cataract formation in uveitis occurs due to uncontrolled inflammation and also because of the use of steroids. Managing the case of a complicated cataract is a challenging task for an ophthalmologist, as it also requires meticulous control of the inflammation and management of the primary intraocular disease. Hence, a multidisciplinary approach is required [4].

### KEYWORDS

Anterior Uveitis, Complicated Cataract, Synechia, Steroid

#### Case Report

A 59 year old male came with complaints of diminution of vision in both eyes since one and half years (Right eye > Left eye). Patient was apparently alright one and half years back, then he noticed diminution of vision in both eyes (right eye > left eye) which was gradual in onset and progressive. No h/o redness and pain at presentation / discharge/ floaters /trauma/fever/ chronic cough/ loss of weight/joint pain/ skin disorders. Patient gave past history of three episodes of pain and redness in right eye in past one and half years. Last episode was around 1 year back. All episodes resolved with some topical medications. Details were not available. There was no history of eye surgeries /any other systemic disorders. On examination, Right Eye Vision was 6/60. Best corrected visual acuity was 6/18 with -1.0 D sph/+0.5D cyl @59 degrees, eyelids and conjunctiva were normal, old, fine keratic precipitates were seen on endothelium, anterior chamber was of normal depth, iris had few spots of depigmentation with multiple posterior synechia. Pupil was 4mm in size, irregular, festooned, not reacting to light. Posterior subcapsular cataract was present suggestive of complicated cataract, IOP was 16 mm Hg. On indirect and direct ophthalmoscopy media were hazy, optic disc was normal with cup disc ratio 0.3, foveal reflex was dull, rest visualized fundus was normal.



Left eye uncorrected vision was 6/18. Best corrected visual acuity was 6/6 with -1.5 D sph/ +0.75D cyl. @120 degrees. Rest anterior

segment and fundus was normal.

Lacrimal sac syringing was patent in both eyes. Extraocular movements were full and free in both eyes. On gonioscopy both eyes had open angle (Grade 4), No peripheral anterior synechia were seen, B scan was normal.

CBC, RFT, LFT, Blood sugar level, ESR & CRP were within normal limits, Mantoux test was negative, Chest x ray PA view was normal. Sputum test was negative for acid fast bacilli. VDRL test was negative.

#### DIAGNOSIS

Right eye uveitic cataract with resolved anterior uveitis. Left eye was normal.

#### Management

Patient was managed by preoperative oral Steroids 1 mg/kg/day for 1 week prior to surgery, then Right eye Small Incision Cataract Surgery with synechiolysis with PCIOL implantation was done followed by postoperative oral Steroids tapering (which started with 1 mg/kg/day preoperatively) and topical eyedrop Prednisolone acetate 1% 6 times a day and Eyedrop Moxifloxacin 0.5% 6 times a day, Eyedrop Nepafenac 0.1% TDS for 6 weeks, and Tab. Ciplox 500 mg BD, Tab. Pan 40 mg OD, Tab. MVBC BD for 5 days.

#### Follow up:

Patient is followed up on postoperative day 1, day 3, day 7, 2 weeks, 4 weeks, 6 weeks. Right eye BCVA on postoperative day 1 was 6/24 and on postoperative day 3, day 7, 2 weeks, 4 weeks and 6 weeks BCVA was 6/12.

#### RESULT:

Strict control of inflammation and newer surgical instruments and techniques have greatly improved the visual outcome of patients with uveitic cataracts.

#### DISCUSSION

A cataract is an opacification of the eye's crystalline lens that prevents the light rays from reaching the retina, leading to a visual impairment

that significantly affects the patient's quality of life. A complicated cataract refers to the opacification of the crystalline lens secondary to intraocular diseases, mainly intraocular inflammatory conditions that include anterior, intermediate, or posterior uveitis. However, other intraocular conditions have also been identified that lead to the development of complicated cataracts. It is especially disabling in the younger age group because of the visual impairment and need for cataract surgery with its own complications.

Cataract has emerged as a leading cause of visual impairment and blindness. Complicated cataracts develop as one of the most common complications of chronic uveitis or recurrent uveitis.

The crystalline lens is an avascular structure. It derives nutrition mainly from intraocular fluids. In complicated cataracts, the metabolism of the lens is deranged due to the diffusion of toxins released in the ocular fluids either due to inflammation or degenerative conditions. The posterior capsule of the lens is thin and lacks epithelial support; hence the toxins diffuse posteriorly, leading to the development of opacification in the posterior pole at the earliest stage. A posterior subcapsular cataract is the commonest manifestation of complicated cataracts.

Cataract formation in uveitis occurs due to uncontrolled inflammation and also because of the use of steroids.

Managing the case of a complicated cataract is a challenging task for an ophthalmologist, as it also requires meticulous control of the inflammation and management of the primary intraocular disease. Hence, a multidisciplinary approach is required.

Patients with uveitis may develop significant visual morbidity due to development of secondary cataract. Complete quiescence of inflammation i.e. quiescent eye for 3 months needed before cataract surgery. The surgical management of cataract among patients with uveitis may be very challenging due to Small pupil, Shallow anterior chamber, Posterior synechiae, Peripheral anterior synechiae, pupillary membrane, Zonulolysis. But newer surgical instruments and techniques such as Intracameral Adrenaline, viscomydriasis, Synechiolysis, Stretch Pupilloplasty, Disposable Iris hooks, Multiple sphincterotomies, etc. have greatly improved the visual outcome of patients with uveitic cataracts.

In inflammatory conditions such as uveitis, the visual prognosis varies according to the different forms of uveitis and depends on the preoperative and postoperative control of inflammation. Fuchs' heterochromic iridocyclitis has a good visual outcome and no significant postoperative inflammation. Juvenile idiopathic arthritis-associated uveitis has a guarded visual prognosis due to the high risk of postoperative inflammation. However, strict control of inflammation can achieve a satisfactory visual outcome. Cataract surgery in Behcet's disease has a guarded prognosis due to intense inflammation and other complications such as optic atrophy, epiretinal membrane. Besides these autoimmune conditions, the infectious uveitis should be treated properly by appropriate antimicrobial prophylaxis as it has a high risk of recurrence, which will complicate the postoperative outcome.

## REFERENCES

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