

A CASE REPORT OF TRAUMATIC CATARACT IN YOUNG MALE**Dr. Sandeep Ankam*, Dr. Vinay Aluri, Dr. Ramesh Gorre, Dr. Adhunika Marella**Intern (Gandhi Hospital), Department of Pharm. D, CMR College of Pharmacy, Hyderabad
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Author****Dr. Sandeep Ankam**Intern (Gandhi Hospital),
Department of Pharm. D,
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Pharmacy, Hyderabad
Telangana State, India.**ABSTRACT**

Ocular trauma is the most common cause of monocular blindness and ocular morbidity almost all over the world particularly in younger age group and it has always been a professional challenge to the ophthalmologist. 24 years of young male came with chief complaints of blurred vision, appearance of black dot with visual disturbance which is rarely occurred. Based on past medical history and impression of fundus examination condition was finally diagnosed as Traumatic Cataract. Patients with traumatic cataract can have an optional or best possible visual outcome depending upon management and complications. Young males are commonly affected. Taking protective measures in sports and work and patient education can avoid ocular trauma and traumatic cataract formation.

KEY WORDS: Traumatic Cataract, Intraocular lens (IOL), Subcapsular cataract, Blurred vision.

INTRODUCTION

Ocular trauma is the most common cause of monocular blindness and ocular morbidity almost all over the world particularly in younger age group and it has always been a professional challenge to the ophthalmologist.^[1]

Development of cataract following either blunt or perforating trauma is a common occurrence. Visual outcome is not dependent on type of trauma, that is either perforating or non-perforating.^[2] Extra-capsular cataract extraction and posterior chamber intraocular lens (IOL) implantation would be the gold standard of visual rehabilitation in such eyes.^[3-6]

The diagnosis of cataract is usually clinically obvious and does not need the support of imaging. The usual senile cataract is not apparent on computed tomography (CT) scans. Generally, diagnosed by performing fundus examination.

Surgery of traumatic cataract can be primary or secondary. Primary cataract removal is suggested if the lens is fragmented, swollen causing a pupillary block or to examine the posterior segment otherwise blocked by lens opacity. Secondary cataract removal is more Beneficial because of improved visibility, proper intraocular lens calculation, and less chances of postoperative inflammation.^[11]

CASE PRESENTATION

24 years of young male came with chief complaints of blurred vision, appearance of black dot with visual disturbance which is rarely occurred.

Has a history of trauma to the left eye at the age of 10 years, by fallen down on the rock. This has been lead to severe pain and inflammation of eye, which was subsided on taking medication.

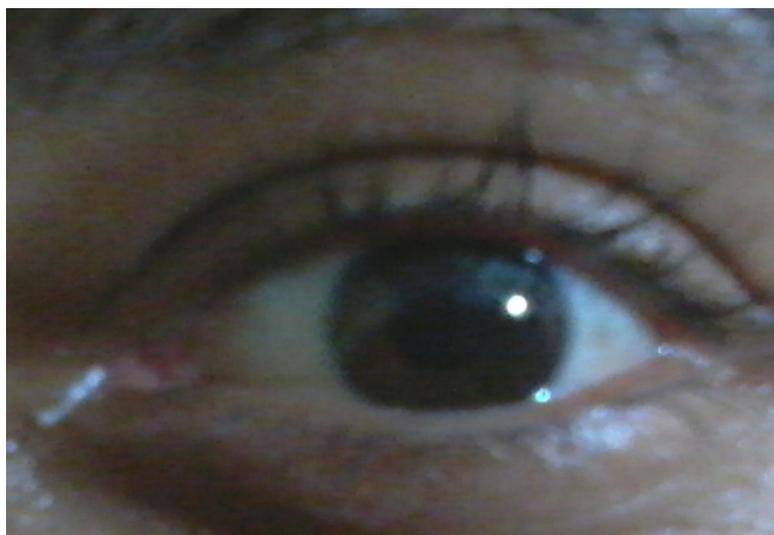
General eye examination revealed, Dv for distance B/E-A/S-NAD and pupil-NSRL AR-Right eye – sph (-1.00), cyl(-0.50) and axis(133), AR-Left eye - not found. Right eye vision 6/12 with -0.50 distances 6/6. Left eye vision 6/24 NAG.

Further investigations like fundus examination was performed, right eye impression was found to be normal and left eye revealed post Subcapsular cataract noted in visual axis. Based on past medical history and impression of fundus examination condition was finally diagnosed as Traumatic Cataract.

Then, in patient's next visit all the pre-operative lab tests were performed and which were found to be normal. Finally the condition was corrected by Left eye Phaco-emulsification with intraocular posterior chamber foldable lens +19.5 D. No complications were occurred during surgery. Which was followed by post-operative treatment with Tab. Ciprofloxacin 500mg/PO/BD, Tab. Paracetamol 500mg/PO/BD, Prednisolone acetate eye drops hourly/each time one drop, for five days. Followed by Moxifloxacin eye drops 6times/day for 1 month, Prednisolone was decreased to 6, 4, 3 times a day for every 10 days.



Picture 1: Left eye Phaco-emulsification with intraocular posterior chamber foldable lens +19.5 D implantation.



Picture 1: Left eye after implanting UV with blue light filter (Length-13.0mm, Optic-6.0mm).

DISCUSSION

Capsular ruptures following rock hit trauma are infrequent. Posterior capsular tears secondary to rock hit trauma are more common than anterior capsular tears.^[7] The difference is likely due in part to the fact that the posterior capsule is thinner and weaker than the anterior capsule, making it more vulnerable to this type of injury.

CATARACT TYPES AND MECHANISM^[8-10]

The lens begins as a clear magnifying glass inside your eye, but with time can opacify. Most cataracts are of idiopathic aetiology, though there are many associated conditions that lead to both congenital and environmentally induced lens opacities. Here is a short summary of the important cataract.

Nuclear sclerotic cataracts

NSCs are the most common type of cataract and many consider them to be a normal maturation of the lens. Over time, the lens becomes larger and brunescent (yellow or brown), especially in the denser central nucleus. If this process goes on long enough the opacity eventually leads to visual obstruction and problems with glare. The lens can become so big that it pushes the iris forward, placing the patient at increased risk for angle closure glaucoma.

Posterior Subcapsular Cataract

The PSC cataract forms on the back of the lens, on the surface of the posterior capsule bag. These cataracts tend to occur in patients on steroids, with diabetes, and those with history of ocular inflammation. The opacity looks like breadcrumbs or sand sprinkled onto the back of the lens. This posterior location creates significant vision difficulty despite appearing innocuous on slit-lamp exam. PSC cataracts are quite common, and often occur in conjunction with some degree of NSC.

Congenital Cataracts

Lens opacities in children are of concern because they can mask deadly disease and because they have devastating effects on long term vision. Cataracts in the newborn can be idiopathic or inherited. If small or anteriorly located, they may be visually insignificant.

Traumatic Cataract

A cataract can form after blunt or penetrating injuries to the eye. These traumatic cataracts are more common in young men. When the outer lens capsule breaks, the inner lens swells with water and turns white. The lenses are very soft and easy to suck out, but removal and implant placement can be complicated as the blunt force often tears the zonular support. If the lens is barely hanging in position, it may be safer to consult a retina specialist to remove the cataract from behind (a pars plana approach) to keep the lens from falling back into the eye.

Posterior Capsular Opacification (PCO)

A posterior capsule opacification isn't a true cataract, but an "after cataract" that forms after a cataract surgery. Generally talking about the cataract surgery technique shortly, but basically sucks out the cortex and nucleus then, inject a new lens into the remaining capsule.

CONCLUSION

The optical rehabilitation of unilateral traumatic cataract patients with IOL implants is now widely accepted. However, there is no consensus on whether the traumatic cataract should be removed during the initial repair of the ocular laceration.

Patients with traumatic cataract can have an optional or best possible visual outcome depending upon management and complications. Young males are commonly affected. Taking protective measures in sports and work and patient education can avoid ocular trauma and traumatic cataract formation.

AUTHOR'S CONTRIBUTIONS

SA investigation of the patient, literature research, drafting of the manuscript, corresponding author. VA literature research, drafting of the manuscript. AM, RG drafting of the manuscript. All authors read and approved the final manuscript.

INFORM CONSENT

Written inform consent taken from the patient.

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