
INTRALENTICULAR FOREIGN BODY : A CASE REPORT

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ABSTRACT :

A 68 yrs male presented with Trauma to the left eye with a stone piece 10 days back with pain, redness & dimunition of vision in left eye for 10 days. On examination it was found that there was a self sealing corneal perforation with cataractous lens & an Intra-lenticular foreign body . The patient following initial treatment with topical steroid and antibiotic, underwent lens aspiration with removal of the intralenticular foreign body and insertion of a posterior chamber intraocular lens with good visual outcome.

INTRODUCTION :

Intraocular foreign bodies (IOFBs) account for approximately 40% of all penetrating ocular traumas and intra-lenticular foreign bodies account for approximately 5% to 10% of all IOFBs. Such traumas predominate in young men. When the lens is injured, capsular integrity has been violated and a visually significant cataract may result. In most cases, the lens becomes sufficiently opaque to require cataract extraction for visual rehabilitation. In addition, the escape of lenticular proteins and particles may result in glaucoma and severe intraocular inflammation. The most serious complication of a retained iron-containing IOFB is the development of siderosis bulbi, a sight-threatening complication. In most cases of IOFB, early surgical removal of the foreign body is the treatment of choice, especially with recent surgical advances that enable safe removal of the foreign body with good visual results. However, there are reports

of such injuries resulting in localized non progressive lenticular damage and some physicians have adopted a more conservative approach for the management of these injuries. We describe a case of a patient treated with lens extraction for removal of an intralenticular foreign body.

CASE REPORT :

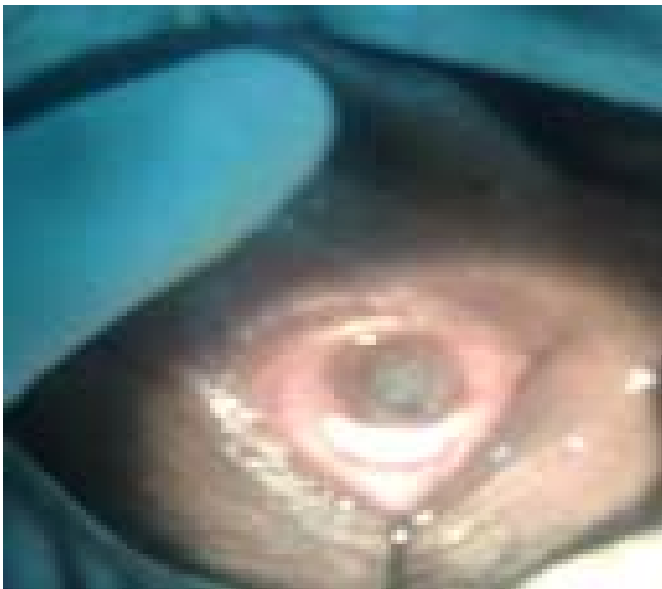
A 68-year-old healthy man with no past ocular history presented with acute visual loss in the left eye, after hammering iron-containing metal on stone. Upon presentation at the hospital after 10 days, his best corrected visual acuity was 6/36 in right eye with IOP 17.3mm Hg and HM +Ve in left eye with IOP 21.3mm Hg . In his left eye, there was a 1 mm self-sealing corneal laceration temporal to the visual axis, midway between the center of the cornea and the limbus. The anterior chamber was deep with rare inflammatory cells. The corneal wound was self-sealed without any leakage.(Siedels test was -Ve) .There was a puncture in the anterior capsule with diffuse anterior subcapsular & cortical opacity and a temporal intralenticular foreign body . Details in Ophthalmoscopy were not visible. A B-scan ultrasound in this eye confirmed the presence of a single intra-lenticular foreign body. The Right eye had an Immature Cortical cataract & other Anterior & Post segment findings were normal. Because the visual function was reduced, the patient received broad-spectrum antibiotics and corticosteroid drops and was elected to undergo combined IOFB removal and lens aspiration with intraocular lens implantation. The method of cataract



Jagabandhu Raut, 68 yrs HM



Self-sealing corneal laceration (LE)



Surgical removal of Lens & Intra lenticular foreign body.



Intra ocular stone 0.3x0.4mm in dimension

surgery was SICS. The foreign body was removed with a MacPherson forceps after the capsulorhexis was created, then delivery of lens was done, and Posterior chamber intraocular lens (PCIOL) implant placed in the capsular bag. The patient has done well postoperatively and his final visual acuity was CF at 5m on Post op day 3. The patient was given topical Antibiotic steroid drops, Oral antibiotics, oral steroids & mydriatics & is currently under follow-up.

DISCUSSION :

Lens injury is a frequent sequel of trauma involving IOFB. The natural history of lens capsule violation by an IOFB is unclear. The healing capacity of the anterior lens capsule is well documented and is thought to result from the presence of the subcapsular epithelium. If the capsule defect is small, epithelial proliferation rapidly restores its continuity, limiting the free passage of ions and fluid that may result in progressive cataract formation. If the

capsular defect is less than 2 mm it will probably seal by itself. If it is greater than 2 mm, progressive cataract formation will probably occur. The management of intralenticular foreign bodies is controversial. In deciding how to manage the traumatized crystalline lens, one should consider patient factors, IOFB characteristics, the location and extent of the lenticular involvement, associated injuries, and procedures to be performed. The patient's age is particularly important because of the accommodative potential in younger patients. To correct far vision in these patients with an IOL would at best necessitate the use of a corrective lens for near in the involved eye. This subsequent refractive problem in this age group could be disabling. When small, eccentric lens injuries occur, an alternative management is sparing the crystalline lens, removing the foreign body using a magnet or a forceps. However, performing initial lensectomy would save the patient from further surgery. Siderosis bulbi is a sight-threatening complication of a retained iron-containing intraocular foreign body and may occur 18 days to 8 years after ocular injury. The clinical findings include iris heterochromia, pupillary mydriasis, cataract formation and retinal pigmentary degeneration. Although

progression to siderosis bulbi is less likely when the foreign body is localized anterior to the lens than when the foreign body is in the posterior segment, ocular siderosis may occur with an intralenticular foreign body. In case one decides to treat a patient conservatively, he/she should be monitored with serial electroretinograms every 2 to 3 months, with prompt removal of the foreign body should signs of ocular siderosis occur.

CONCLUSION :

The cause of decreased vision in our case was probably due to diffuse anterior subcapsular & cortical opacity. There were no ocular signs of siderosis bulbi. The decision of performing a one step procedure was taken because the patient resides far from our hospital facility, and would not be able to come at frequent intervals. In spite of postoperative inflammation that occurs in most patients, good visual results are possible, as observed in this patient. Usually intra ocular foreign bodies are metallic but in our pt there was an intralenticular stone. The use of the appropriate protective eyeglasses in activities with ocular injury risk is extremely important, and should therefore be legally reinforced to minimize serious ocular complications

