



TRAUMATIC PSEUDOPHACOCELE (A RARE CASE REPORT)

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ABSTRACT **BACKGROUND** A rare presentation of pseudophacocele in a case of occult scleral rupture sustained after blunt trauma to the eye. Previously reported cases were managed by extraction of intraocular lens rendering the eye aphakic. Appropriate surgical intervention which includes subconjunctival lens extraction, scleral wound exploration and repair, anterior chamber wash was done under general anaesthesia. This case report aims to evaluate clinical presentation, management and the visual outcome in a case of traumatic pseudophacocele.

KEYWORDS : Blunt trauma, pseudophacocele, extraction of intraocular lens, aphakic

INTRODUCTION

Traumatic pseudophacocele is dislocation of posterior chamber intraocular lens (IOL) into the subconjunctival^[1] or subtenon region following blunt trauma. Biedner et al.^[2] first reported the subconjunctival extrusion of an IOL associated with globe rupture following blunt ocular trauma. Traumatic pseudophacocele is an emergency situation mostly associated with catastrophic manifestations like scleral wound dehiscence, total hyphaema, iridodialysis, vitreous haemorrhage and retinal detachment which may lead to endophthalmitis^[3] and pthisis bulbi if not managed well. Predisposing factors include previous ocular surgeries, traumatic scleral scar, recurrent episodes of scleritis and connective tissue disorders.^[9,10]

CASE REPORT

We report a case of a 77 year old female who



Figure 1. Clinical photograph of traumatic pseudophacocele (left eye) in diffuse illumination

sustained blunt trauma left eye due to fall. Post trauma she had complaints of pain and sudden diminution of vision in her left eye which was associated with redness and mild swelling.

She was initially treated conservatively by the local doctor for 05 days and later referred to our hospital for further management. She is a known case of hypertension and diabetes mellitus with a history of cataract surgery (left eye) 04 years back and fracture neck of femur(right) operated 02 years ago. On general examination, her vitals were stable. On ocular examination, visual acuity was hand movements close to face in right eye and perception of light with accurate projection of rays in all four quadrants in left eye. The slit-lamp examination of the right eye revealed a white mature cataract.

The left eye revealed a solid globular subconjunctival mass with surrounding subconjunctival hemorrhage in the superonasal quadrant measuring 8×6 mm with smooth surface and rounded margins extending from 10 o'clock to 12 o'clock hours (Figure 1). Anterior chamber detail and fundus could not be analyzed because of

hyphaema. Intraocular pressure was 14mm Hg in right eye and 10mm Hg in left eye. B- scan ultrasonography (USG) revealed vitreous haemorrhage with absence of lens spike in the axial scan (Figure2). The patient was diagnosed as a case of open globe injury with occult scleral rupture and was immediately taken up



Figure 2. B - scan image depicting vitreous opacity suggestive of vitreous haemorrhage with intact retina (left eye)

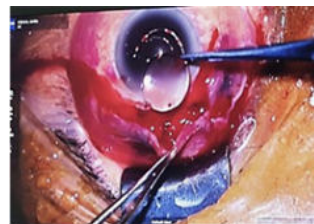


Figure 3. Intraoperative photograph showing recovered intraocular lens by conjunctival peritomy

for wound exploration under general anaesthesia. Conjunctival peritomy was done and the subconjunctivally dislocated PMMA posterior chamber intraocular lens (PCIOL) was removed (Figure 3).



Figure 4. Intraoperative photograph showing the sutured scleral defect

The subconjunctival scleral defect from 10 o'clock to 2 o'clock position approximately 2 mm away from the limbus was noted at the site of the prior cataract surgery incision. Wound was explored and the defect was sutured with six interrupted 8-0 nylon sutures and conjunctiva was repositioned over the wound and secured with two 8-0 nylon sutures (Figure 4 and 5).

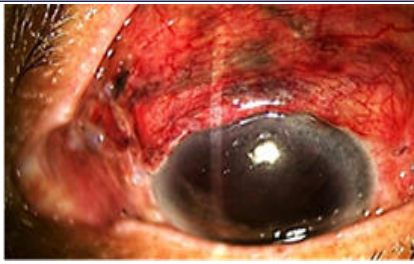


Figure 5. Clinical photograph of the left eye on the first postoperative day

To remove the blood and vitreous from the anterior chamber, limited anterior vitrectomy with 23G vitrectomy cutter and anterior chamber wash with bimanual irrigation and aspiration was done. Postoperatively she was left aphakic and the best corrected visual acuity was hand movements close to face in the left eye with satisfactory anterior segment. The need for future vitrectomy and secondary intraocular lens implantation was elucidated to the patient. Meanwhile the patient underwent right eye cataract surgery with PCIOL implantation after 03 weeks and postoperative best corrected visual acuity in right eye was 6/9. It was also noted that the anterior segment in the left eye remained quiet and there was no vitreous incarceration in the wound.

The patient was planned for left eye pars plana vitrectomy and scleral fixation of intraocular lens in the second sitting after 03 weeks. The patient underwent the procedure and postoperatively the best corrected visual acuity in the left eye was 6/12.

CONCLUSION

In a study of ocular trauma in eyes with conventional extracapsular cataract extraction, wound rupture occurred in 86% of cases with IOL extrusion through the operative wound in 68% of cases.^[4] In pseudophakic eyes, following a blunt trauma, the globe ruptures at its weakest point, i.e. the surgical wound from previous cataract surgery^[5] as seen in our patient. Blunt trauma of sufficient magnitude can cause scleral rupture resulting in dislocation of lens into subconjunctival space.^[6] During blunt trauma, the energy is transmitted from the site of impact superiorly and posteriorly resulting in collision of globe with the orbital wall leading to rupture of sclera.^[7] Superonasal quadrant near the limbus is the most common site for pseudophacocele^[8] which was also seen in this patient. Early surgical correction of the scleral rupture, extent of which is often identified only during surgery, and any associated injury as well as visual rehabilitation at a later stage for optimal visual outcome is required.

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Nil.

CONFLICTS OF INTEREST

There are no conflicts of interest.

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