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Phacocele: A Case Report

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ABSTRACT

Phacocele is defined as the dislocation of crystalline lens into subconjunctival space through the scleral defect following trauma.

A 60 years old female sustained blunt trauma to her left eye showed a 360° hemorrhagic chemosis with a well circumscribed hematoma of size 1.5 cm × 2 cm extending from 11'o to 12'o clock position. Visual acuity was light perception. Intraocular pressure (IOP) was 20 mmHg. USG B Scan of the left eye showed superior dislocation of lens into subconjunctival space, choroidal detachment, and vitreous hemorrhage. The patient underwent wound exploration, lens extraction, and repair of scleral defect. The patient was left aphakic. Postoperatively, she could appreciate hand movements only. Blunt trauma can result in indirect scleral rupture resulting in dislocation of lens into subconjunctival space. Phacocele should therefore be suspected in a case of occult scleral rupture with localized hematoma. Visual outcome depends on timely diagnosis, proper management, and associated ocular complications.

KEYWORDS: Phacocele, choroidal detachment, vitrectomy

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INTRODUCTION

The dislocation of crystalline lens into subconjunctival space through the scleral defect following trauma is known as Phacocele¹. It is reported that the incidence of phacocele is only 13% among all cases of lens dislocation.² Increased scleral rigidity along with hard nucleus predisposes an elderly individual to the development of phacocele following blunt trauma. Other predisposing factors are previous ocular surgery, scleritis, and connective tissue disorders².

CASE REPORT

A 60 years old female sustained blunt trauma to her left eye by fall of a ripe coconut fruit from a considerable height followed by diminution of vision and pain in left eye. On examination, the left eye showed a 360° hemorrhagic chemosis with a well circumscribed hematoma of size 1.5 cm × 2 cm extending from 11'o to 12'o clock position. Cornea was clear, anterior chamber had hyphema grade I with iris pigments. There was poor fundal glow suggestive of vitreous hemorrhage. Visual acuity was light perception only. Intraocular pressure (IOP) was 20 mmHg. USG B Scan of the left eye showed superior dislocation of lens into subconjunctival space, choroidal detachment, and vitreous hemorrhage.



Fig 1: Superonasal hemorrhagic chemosis with a well circumscribed hematoma with dislocated lens

MANAGEMENT

After proper counseling, patient underwent wound exploration, lens extraction, and repair of scleral defect. Under peribulbar anesthesia, peritomy was done from 10'o to 2'o clock position. Superonasally located cataractous lens was extracted. Scleral defect was noticed from 11'o to 12'o clock position, 3 mm away from limbus, parallel to the superior limbus. Uveal tissue prolapsing through the defect was abscised followed by suturing of the scleral defect with 8-0 ethilon. The patient was left

aphakic. Postoperatively, she could appreciate hand movements only. This was probably due to associated hyphema, choroidal detachment, and vitreous hemorrhage. The patient was explained about the need for future vitrectomy with placement of sclera fixated IOL and discharged on medication on 2nd postop day with referral to vitreo-retinal surgeon.

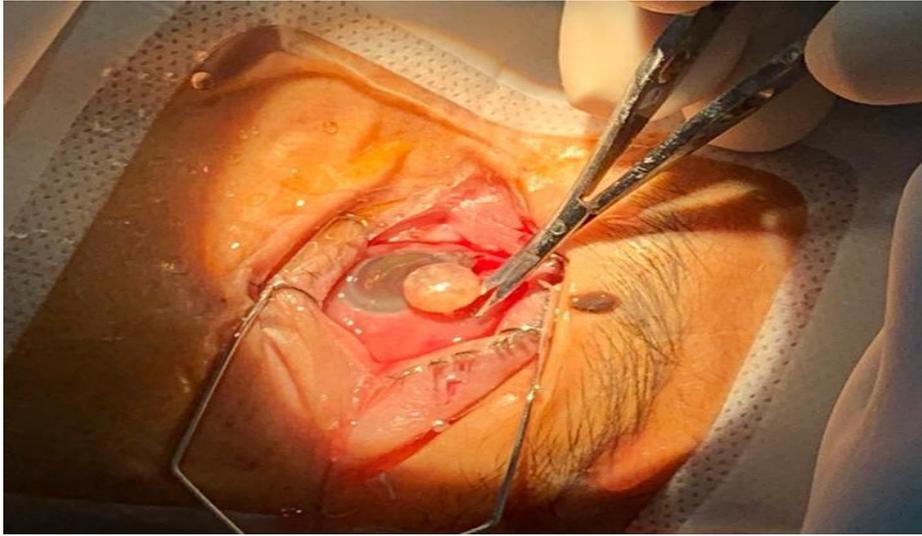


Fig 2: Extracted cataractous lens

DISCUSSION

Blunt trauma of sufficient magnitude can result in scleral rupture resulting in dislocation of lens into subconjunctival space, which is known as Phacocoele.¹ The incidence of phacocoele is only 13% among all cases of lens dislocations.² 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.³ Superonasal quadrant is the most common site for phacocoele,⁴ which was seen in our patient. In our case, injury was sustained by fall of a ripe coconut fruit from a considerable height. Phacocoele cases usually present with diffuse subconjunctival hemorrhage and a well delineated subconjunctival mass⁵. In our case, anterior chamber was deep with hyphema and ultrasonography showed choroidal detachment and vitreous hemorrhage. Phacocoele usually treated with wound exploration, lens extraction, anterior vitrectomy, and scleral wound repair⁶. Almost all cases are treated with scleral fixation IOL, during initial repair or during follow up. BCVA during postoperative period ranged from 20/20 to 20/100⁶. Our patient had vitreous hemorrhage and choroidal detachment due to which the postoperative BCVA was only appreciation of hand movements.

CONCLUSION

Blunt trauma can result in indirect scleral rupture resulting in dislocation of lens into subconjunctival space. Phacocele should therefore be suspected in a case of occult sclera rupture with localized hematoma. Visual outcome depends on timely diagnosis, proper management, and associated ocular complications.

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