

Posterior lenticonus masquerading as posterior capsular rupture following blunt trauma

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Key words: Blunt trauma, lenticonus, posterior capsular rupture, subcapsular cataract

Case Report

A 15-year-old male presented with sudden diminution of vision in the right eye following blunt trauma with a wooden stick. On examination, the visual acuity (VA) was finger counting 2 m, intraocular pressure (IOP) was 18 mm Hg, and slit lamp biomicroscopy showed dispersed hyphema in the anterior chamber. After 3 weeks of medical management, hyphema resolved, VA improved to 20/60, and IOP was 30 mm Hg. Gonioscopy revealed angle recession in 6 o'clock hours in inferior quadrant (3 o'clock to 9 o'clock). A diffuse slit lamp illumination showed a demarcated semicircular cataract in the inferior part of the lens [Fig. 1a] with a broad slit showing backward deviation of the beam at the level of posterior capsule (PC) [Fig. 1b].

Further evaluation with anterior segment optical coherence tomography (ASOCT) showed an ectatic PC in the area of demarcated cataract [Fig. 2] and a provisional diagnosis of posterior lenticonus was thus made. After 2 weeks on antiglaucoma agents, the patient presented with total cataract [Fig. 1c] when phacoemulsification with intraocular lens implantation in bag was carried out. Intraoperatively, concentric area of fibrosis was noted in the inferior part of PC. After surgery, unaided VA was 20/30 and ASOCT showed PC folds [Fig. 3].

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Discussion

Isolated PC rupture following trauma may resemble posterior lenticonus.^[1] After trauma, lenticular epithelium becomes

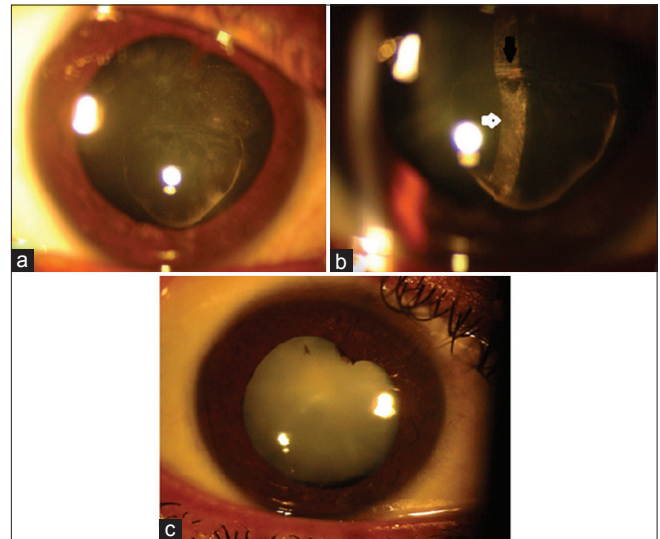


Figure 1: Slit lamp photograph (a). Diffuse illumination showing traumatic mydriasis, a posterior synechia at 12 o'clock position, and a demarcated posterior subcapsular cataract (b). Focal slit illumination showing backward deviation of slit beam at the level of posterior capsule in the area of cataract (white arrows), increased opacification of posterior capsule at the margins of cataract, and wrinkling of posterior capsule at the superior margin (black arrows). (c) Diffuse illumination showing total cataract and visible lens edge in the inferior 2 o'clock hours

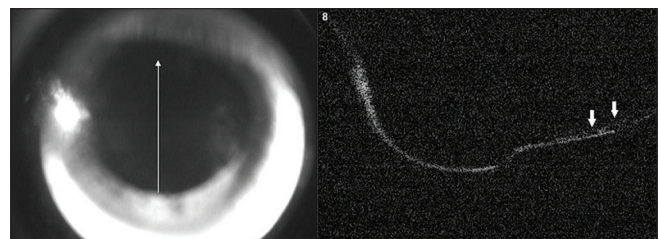


Figure 2: Anterior segment optical coherence tomography image (vertical section) showing intact and ectatic posterior capsule with layering of posterior capsule in the superior area (arrows)

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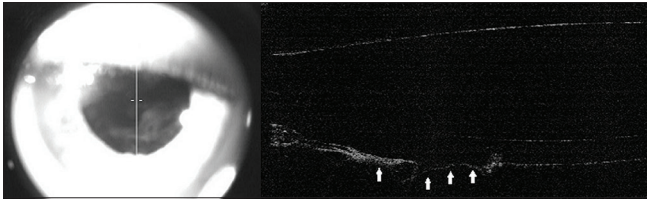


Figure 3: Anterior segment optical coherence tomography image (vertical section) showing intraocular lens in bag and posterior capsule folds (arrows) in the area of previous lenticonus

hyperplastic, undergoes fibrous metaplasia, and starts migrating along the PC in an attempt to heal the defect which not only manifests as fibrosed margins of PC break but may also migrate over the intact anterior vitreous phase, thus giving a false impression of an intact PC in some cases.^[1,2]

Conclusion

Our patient had sustained blunt trauma. Presence of wrinkling of PC along the superior margin and fibrosed margins gave an impression of PC break with anterior vitreous phase opacification. However, ASOCT confirmed the diagnosis of posterior lenticonus.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Matalia J, Kasturi N, Anaspure H, Shetty BK, Matalia H. Isolated posterior capsular split limited by Weiger's ligament after blunt ocular trauma in a child mimicking posterior lenticonus. *J AAPOS* 2015;19:557-8.
2. Vajpayee RB, Angra SK, Honavar SG, Titiyal JS, Sharma YR, Sakhuja N. Pre-existing posterior capsule breaks from perforating ocular injuries. *J Cataract Refract Surg* 1994;20:291-4.