

Post-traumatic suprachoroidal dislocation of crystalline lens and its management

Mahesh P Shanmugam, Payal Shah, R Rajesh, Divyansh K Mishra, Pradeep Sagar, Abhishek Sheemar

Key words: Lens dislocation, suprachoroidal lens, trauma, vitrectomy

A 34-year-old gentleman met with road traffic accident 3 months ago with multiple fractures and ocular trauma. On examination, his best-corrected visual acuity (BCVA) was perception of light with hyphema in both eyes. Pupil reactions were sluggish; there was no view of fundus in both eyes. Intraocular pressure was 8 and 7 mmHg in the right eye (RE) and left eye (LE), respectively.

Ultrasound showed hyperreflective echoes in the temporal quadrant suspicious of dislocated lens along with vitreous hemorrhage [Fig. 1a] in RE and closed-funnel RD in LE.

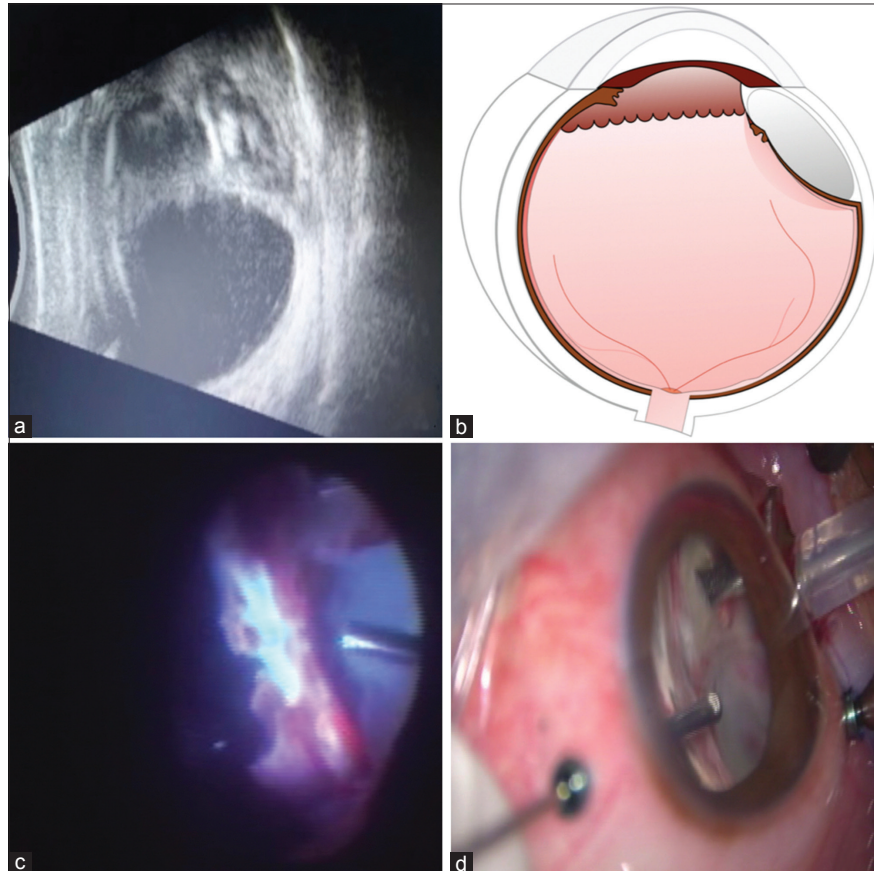


Figure 1: (a) Ultrasound of right eye showing hyperreflective dot and membrane echoes, (b) pictorial representation of suprachoroidal dislocated lens, (c) intraoperative view of taut separated choroid and the lens lying in the suprachoroidal space, and (d) residual lens in suprachoroidal space removed with cutter by indentation and adjacent sclera visible

Video Available on: www.ijjo.in

Access this article online

Quick Response Code:



Website:

www.ijjo.in

DOI:

10.4103/ijjo.IJO_1656_18

Department of Vitreoretina and Ocular Oncology, Sankara Eye Hospital, Bengaluru, Karnataka, India

Correspondence to: Dr. Payal Shah, Department of Vitreoretina and Ocular Oncology, Sankara Eye Hospital, Bengaluru, Karnataka, India. E-mail: n.payalshah@gmail.com

Manuscript received: 04.11.18; Revision accepted: 18.03.19

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

Cite this article as: Shanmugam MP, Shah P, Rajesh R, Mishra DK, Sagar P, Sheemar A. Post-traumatic suprachoroidal dislocation of crystalline lens and its management. *Indian J Ophthalmol* 2019;67:1469-70.

RE was operated first. A 6-mm infusion cannula was placed. After clearing vitreous hemorrhage, scar tissue in the periphery was dissected with a cutter. During dissection in the temporal quadrant, fluffy white crystalline lens was seen in a trough formed due to separation of contracted taut choroid from sclera [Video 1 and Fig. 1b-d] which was removed with a 23G cutter. The retina was attached. In view of taut choroid, a 240-belt buckle was planned. After peritomy, an occult scleral tear with scarring was noted in the temporal quadrant. After placing tractional stay sutures, the recti were tagged by rail-road technique and sharp dissection of scarred tissue. Scleral tunnels were made in the three quadrants, while in the superotemporal quadrant, the belt was supported using sutures and sleeve was placed in inferotemporal quadrant (ITQ).

Subsequently LE was operated and the retina was attached.

At 1 year, BCVA improved to 6/60 in RE and 1/60 in LE. In both eyes, retina was attached.

Posttraumatic lens dislocation into anterior chamber,^[1] subconjunctival space,^[2] vitreous cavity, and subretinal space^[3,4] has been reported. To the best of our knowledge, this is the first case report on suprachoroidal dislocation of crystalline lens.

Careful peripheral scar tissue dissection helped to visualize the lens in suprachoroidal space in our case. Challenges such as peripheral scar tissue, taut choroid causing sclerochoroidal separation, occult scleral tear, and scarred tenon's tissue posing difficulty in placing belt buckle after trauma are well-demonstrated.

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.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Shuen JA, Malone M, Burke Z, Baquero A. Traumatic anterior dislocation of the lens. *J Emerg Med* 2018;55:565-6.
2. Maurya RP, Bhushan P, Singh VP, Singh MK, Kumar P, Yadav I. Traumatic subconjunctival dislocation of fractured posterior chamber intraocular lens by cow horn injury. *J Clin Exp Ophthalmol* 2015;6:399.
3. Rani A, Pal N, Vohra R, Mandal S, Azad R. Subretinal dislocation of the crystalline lens: Unusual complication of phacoemulsification. *J Cataract Refract Surg* 2005;31:1843-4.
4. Nagaraj BN, Tirumale S, Sriprakash KS, Savitha CS, Jaydev C. Subretinal crystalline lens – An unusual complication of blunt trauma. *Asian J Ophthalmol* 2013;13:68-70.