Case Letter

Elderly male with blurry vision

Anthony Maselli, Sarah E. Frasure

Department of Emergency Medicine, Brigham and Women's Hospital, Boston, Massachusetts 02115, USA

Corresponding Author: Sarah E. Frasure, Email: sarahfrasure@yahoo.com

World J Emerg Med 2019;10(1):59–60
DOI: 10.5847/wjem.j.1920–8642.2019.01.010

Dear editor,

We present a case of an elderly gentleman who was punched in the face and subsequently diagnosed by an emergency physician with acute angle closure glaucoma secondary to a posterior lens dislocation. Slit lamp evaluation, ocular ultrasound, and computed tomography (CT) imaging, can identify a dislocated lens. A rare complication of a lens dislocation includes secondary acute angle closure glaucoma. Treatment of lens dislocation includes prosthetic lens placement or re-attachment in cases of a partial lens dislocation.

CASE

A 71-year-old male with a history of hypertension and glaucoma presented to the emergency department (ED) with pain and decreased vision in the left eye after being punched in the face three weeks prior while on vacation. He denied diplopia, headache, neck pain, or rhinorrhea. His vital signs were unremarkable. His physical exam was notable for a fixed, dilated left pupil to 7 mm with scleral injection. Intraocular pressure was measured at 14 mmHg OD and 56 mmHg OS. Extraocular movements were intact. A point-of-care ultrasound (Figure 1) and CT scan (Figure 2) were performed.

The patient was diagnosed with acute angle closure glaucoma secondary to a posterior lens dislocation. The patient was seen by the ophthalmology service. In an attempt to reduce the intraocular pressure, he was provided with an oral carbonic anhydrase inhibitor, latanoprost, brimonidine, and timolol eye drops. Delayed surgical repair of the lens was scheduled.

DISCUSSION

Lens dislocation occurs when the lens detaches

Figure 1. Point-of-care ultrasound of the patient's left eye performed with a linear transducer (4–12 MHz) in the transverse position demonstrates a dislocated lens (arrow). The dislocated lens is identified as a round structure with a hyperechoic rim; it is visualized in the posterior aspect of the vitreous chamber.

Figure 2. Axial view of the patient's head on computed tomography (CT) imaging demonstrates a complete lens dislocation in the left eye (arrow).

from the ciliary bodies. Risk factors include blunt ocular trauma, Marfan syndrome, Weill-Marchesani syndrome, sulfite oxidase deficiency, and homocystinuria.^[1–3] Slit lamp evaluation, ocular ultrasound, and CT imaging, can detect a dislocated lens. Treatment of lens dislocation involves prosthetic lens placement or re-attachment

in cases of a partial lens dislocation.^[1,4] A unusual complication of a lens dislocation includes secondary acute angle closure glaucoma; displacement of the lens causes narrowing of the anterior chamber angle and pupillary block. Emergent ophthalmology consultation and immediate reduction in intraocular pressure is paramount in cases of acute angle closure glaucoma secondary to lens dislocation.

Funding: None.

Ethical approval: Not needed.

Conflicts of interest: The authors declare that there are no conflicts of interest relevant to the content of the article.

Contributors: AM proposed the study and wrote the first draft. All authors read and approved the final version of the paper.

REFERENCES

- 1 Tesser RA, Hess DB, Buckley EG. Pediatric cataracts and lens anomalies. In: Harley's Pediatric Ophthalmology, 5th ed. Philadelphia: Lippincott Williams & Wilkins; 2005:255.
- 2 Neely DE, Plager DA. Management of ectopia lentis in children. Ophthalmol Clin North Am. 2001;14(3):493-9.
- 3 Faivre L, Mégarbané A, Alswaid A, Zylberberg L, Aldohayan N, Campos-Xavier B, et al. Homozygosity mapping of a Weill-Marchesani syndrome locus to chromosome. Hum Genet. 2002;110(4):366-70.
- 4 Aspiotis M, Asproudis I, Stefanidou M, Gorezis S, Psilas K. Artisan aphakic intraocular lens implantation in cases of subluxated crystalline lenses due to Marfan syndrome. J Refract Surg. 2006;22(1):99-101.

Received May 9, 2017

Accepted after revision February 26, 2018