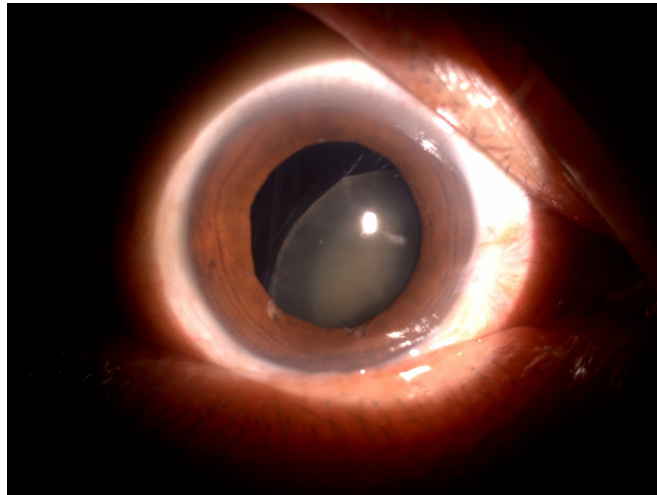


Nadir ALI



A 58-year-old man presented with blurred vision in the right eye that was associated with pain and redness for two weeks prior to presentation. He gave history of being punched on the right eye during a fight two years ago. His visual acuity was 'Hand Movement' in the right eye and 6/7.5 in the left eye. The intraocular pressure was 40 mmHg in the right eye and 14 mmHg in the left eye. His anterior segment examination is shown above (**Panel**).

What is the diagnosis?

Answer: refer to page 63

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(Refer to page 43)

Answer: Right traumatic subluxation of the lens with secondary Aphakic glaucoma

This patient had infero-nasal subluxation of the lens in the right eye secondary to blunt eye injury. The zonules at the superotemporal quadrant of the lens margin are ruptured.

The crystalline lens is a transparent biconvex structure, located posterior to the iris within the muscular ring of the ciliary body. It forms one third of the refractive power of the eye, and is the main source of the eye's accommodation. It is surrounded by a capsule that provides attachment to the zonules of the ciliary body. Other than the zonules, which suspend the lens and its capsule in place behind the iris, the lens has no other anatomical attachment. Thus, loss of the zonular support may lead to its luxation or subluxation.

The lens is considered dislocated (or luxated) when the lens completely lies outside its normal anatomical location. If the lens is displaced but part of it is still seen within the normal anatomical location, the term 'subluxation' is used instead.

The most common cause of lens subluxation is blunt trauma to the eye ball, resulting in mechanical rupture of the zonules and displacement of the lens. ¹ Non-traumatic

Weill-Marchesani syndrome and Ehler Danlos syndrome. Ocular conditions that can be associated with lens subluxation include retinitis pigmentosa, uveitis, aniridia, and pseudoexfoliation syndrome.

The presenting symptoms are usually blurred vision with or without monocular diplopia, photophobia and pain. History of trauma is common. Examination may show decreased visual acuity, high myopia and marked astigmatism, iridodonesis (excessive movement of the iris with eye movement), phakodonesis (excessive movement of the lens with eye movement), vitreous in the anterior chamber with pupillary block, evidence of uveitis, elevated intraocular pressure, as well as obvious displacement of the lens on slit-lamp examination.

If the capsule is intact, lens subluxation (or luxation) can be well tolerated for long periods of time without the need for surgical intervention. However, the resultant refractive error, diplopia and glaucoma may cause the subluxation to become intolerable. If the lens capsule is intact, surgical intervention is only indicated if there is significant disturbance of vision and/or elevated intraocular pressure, and in case of intolerance. Several surgical techniques are adopted globally for the management of this condition. ² (Refer to supplementary Text for the management)

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