Spontaneous disenclavation of phakic intraocular iris claw lens

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Accepted 9 July 2018

DESCRIPTION

A 35-year-old male patient came to the outpatient department with sudden onset painless diminution of vision and diplopia in RE since last 3 days. The vision was 20/200 in the RE and 20/20 in the LE. The patient was a known case of myopia with history of phakic eye iris claw intraocular lens (IOL) of both eyes done 12 years back. There was no history of trauma. His best-corrected visual acuity in the right eye was 20/20 with $-3DS$, $-0.50DC \times 90$ in the OD. The intraocular pressure in the OD was 13 mm Hg and 15 mm Hg in the OS. On slit lamp examination nasal disenclavation of the iris claw lens was noted, the edge of which was bisecting the non-dilated pupillary plane. The IOL was hanging inferiorly with the optic touching the corneal endothelium inferiorly and with the other end fixed at the 9 o'clock position (figure 1). The cornea was transparent. Peripheral iridotomy was noted at the 10 o'clock position temporally. A patch of iris atrophy was noted at the site of the previous iris enclavation. Immediate IOL repositioning was planned. Re-enclavation of the IOL to the iris was done under local anaesthesia, and the IOL was fixed to a site just superior to the previous fixed site (figure 2). On postoperative day 1 the patient had a vision in the OD of 20/20, unaided.

Although post-traumatic dislocation of the IOL has largely been reported, spontaneous late disenclavation of the iris claw lens is a rare complication. A disenclavation that occurs spontaneously may be because of insufficient tissue grasping, or after significant trauma even with adequate enclavation. The disenclavation rate is higher in case of aphakic iris claw lens as compared with phakic claw lens and more in posteriorly fixated IOL than anteriorly fixated IOL. The ideal location of enclavation is the mid-peripheral iris stroma, where the IOL is virtually immobile.¹ The potential complications of a dislocated IOL include endothelial touch with corneal decompensation, hyphema due to trauma to the iris or angle blood vessels, pupillary block, secondary glaucoma and iris tear, and rarely damage to the lens.² Unlike in post-traumatic disenclavation, in spontaneous cases the morphology of iris claw haptics was found to be normal in studies. Insufficient iris stroma grasping with iris tissue sliding off the iris claw fissure is the cause which can be hypothesised in spontaneous disenclavation sites.³ Re-enclavation is a procedure for refixation of the IOL,

Figure 1 Slit lamp image of the RE showing inferior dislocation of the anteriorly fixed iris claw lens with nasal disenclavation.

Figure 2 Slit lamp image of the RE postoperative day 1, with the lens being re-enclavated and air bubble in the anterior chamber.

but it may be technically difficult and does not ensure against further dislocation. In cases with post-traumatic structurally damaged IOLs, IOL replacement is generally preferred.⁴ However, it is very difficult to predict after how much time the complication will arise.

Learning points

- ▶ Spontaneous dislocation of phakic iris claw lens is a rare but dangerous complication.
- ▶ Early management can prevent late complication and very good visual recovery.

Contributors SKP, SM: concept, design, definition of intellectual content, clinical studies, data analysis and manuscript review. SKP: literature search, manuscript preparation and manuscript editing. SM: data acquisition.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent Obtained.

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To cite: Padhy SK, Mandal S. *BMJ Case Rep* Published Online First: [please include Day Month Year]. doi:10.1136/bcr-2018-226521

Provenance and peer review Not commissioned; externally peer reviewed.

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