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Sir,
Phacoemulsification with therapeutic implantation of a prosthetic iris device following peripheral iridotomy visual complication

Persistent visual disturbances occur in 2.7–7%^{1,2} of patients following laser peripheral iridotomy (LPI). Prosthetic iris devices (PIDs) are used to reduce glare in congenital and acquired cases of iris deficiency.³ We report a therapeutic use of endocapsular PID for relief of these symptoms in a patient with occludable angles following LPI.

Case report

A nanophthalmic, 60-year-old gentleman developed linear photopsia following LPI in his OD. Acutities were 6/60 OD and 6/6 OS. His OD was amblyopic and had early nuclear sclerosis. The LPI was covered by the superior eyelid in the primary position of gaze (Figure 1). His symptoms were exacerbated by up gaze and resolved when the superior lid was pulled downward. He could not tolerate peripheral opaque contact lenses.⁴ Corneal tattooing⁵ was not a viable option in the UK as sterile ink was no longer approved for human use. He agreed to undergo phacoemulsification with intraocular lens (IOL) and Morcher ring (Type 50C, Morcher GmbH, Stuttgart, Germany) implantation despite having minimal cataract with little visual improvement potential. Following a routine phacoemulsification and IOL implant, a single PID was inserted and dialled into position. Intracameral acetylcholine was injected to constrict the pupil and allow accurate placement of the opaque leaf of the ring.

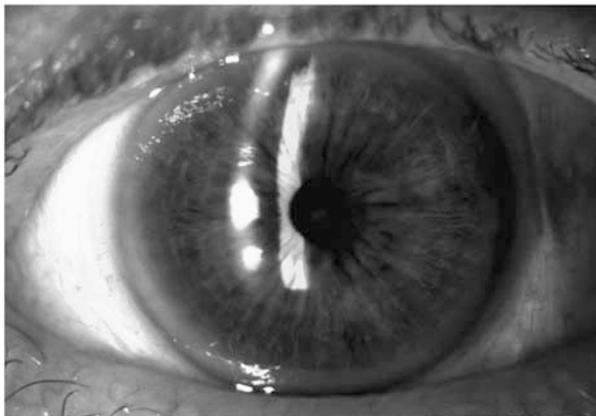


Figure 1 Peripheral laser iridotomy placed at 12 o'clock before surgery.

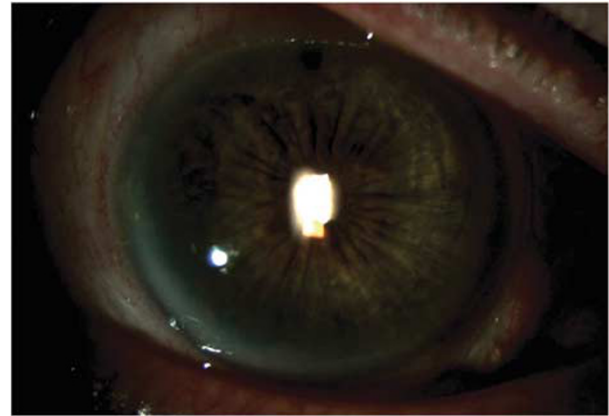


Figure 2 The iridotomy appears completely covered and cannot be seen by retroillumination after the implantation of the Morcher ring in the capsular bag.

At 1-month follow-up, his visual acuity was 6/36 (Figure 2) and his symptoms had completely resolved.

Discussion

Persistent visual disturbances are more common when LPI is placed at the level of the upper lid margin-tear film interface. LPI should be entirely placed under the upper lid, usually at 12 o'clock, or in a fully exposed area when the lid margin is located directly at the limbus. A single PID ring was sufficient to cover the iridotomy. We had difficulties in dialling the PID accurately to cover the iridotomy despite intracameral acetylcholine. We recommend marking the site of the iridotomy at the slit-lamp before pupil dilation. In summary, the implantation of a PID is a good therapeutic alternative to tinted contact lenses, corneal tattooing, and suturing of the iridotomy in patients with glare post LPI.

Conflict of interest

The authors declare no conflict of interest.

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