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Sir,
Response to Drs Salti and Khoury

We thank Drs Salti and Khoury for their thoughtful comments. Certainly, digital imaging is taking an increasingly prominent role in the setting of retinal imaging and we expect that this approach will ultimately replace film imaging. However, for our study, we were interested in answering two specific questions that made film imaging preferable. First, as there is little published data on the evaluation of colour fundus photos for the identification and triage of neovascular AMD, we were interested in determining if this concept was viable. Hence, we desired to use 'gold-standard' imaging and not to introduce a second variable, that of digital imaging. Second, our goal was to evaluate both stereo and nonstereo images sets and, for this purpose, Kodachrome stereo imaging is well-established—digital stereo imaging techniques are still evolving. We also like to caution readers about the use of digital manipulation tools during the process of image interpretation. Depending on the algorithms used, data and potentially diagnostic accuracy, can be lost with contrast enhancement tools and sharpening filters.

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Sir,
Decentration of a foldable single-piece acrylic IOL within the capsular bag

Decentration of intraocular lenses (IOLs) may cause diplopia and functional aphakia. In-the-bag fixation and an intact curvilinear capsulorrhexis are advocated to minimise decentration.^{1,2} Sunset syndrome refers to cases where capsular or zonular disruption allows downward IOL displacement.³ We describe a case of sunset-like decentration due to optic–haptic adhesion, in the presence of intact zonules and in-the-bag fixation.

Case report

Following routine phacoemulsification, a single-piece acrylic SA60AT IOL (Alcon Ft Worth, TX, USA) was injected into the capsular bag using a Monarch cartridge. During insertion, the haptic was noted to be folded behind the optic. The optic appeared to be centred at the end of surgery.

At 1 month postoperatively cystoid macular oedema was noted, but no comment made regarding IOL centration. At 2 months postoperatively, the optic was noted to be decentred 2 mm inferonasally within the capsular bag. No zonular disruption was detected (Figure 1). The capsulorrhexis was well centred in the visual axis.

To reposition the IOL, the capsule was separated from the optic with viscoelastic. When the IOL was freely mobile, optic–haptic adhesion was noted. The adherent haptic was released, resulting in recentration of the lens (Figure 2).

Comment

Injectable IOL implantation is popular due to ease of insertion, smaller incision size, and avoidance of IOL contact with the external eye. Hydrophobic acrylic IOLs are favoured as they induce less capsular fibrosis.⁴ In comparison to three-piece IOLs, optic–haptic adhesion may be more common with one-piece acrylic IOLs due to stickiness and flexibility of the haptics.

Implantation with the Monarch cartridge requires the haptic to be purposely placed on the optic, and the IOL undergoes compression and rotation within the cartridge. Compression of the IOL may be increased by a tight incision, and viscoelastic may influence optic–haptic adhesion. Asymmetric capsule contraction, when there is incomplete capsulorrhexis apposition to the optic surface, may exacerbate optic decentration. Late reopening of the capsular bag is more difficult with acrylic biomaterials due to tenacious capsule–optic adhesion.⁵

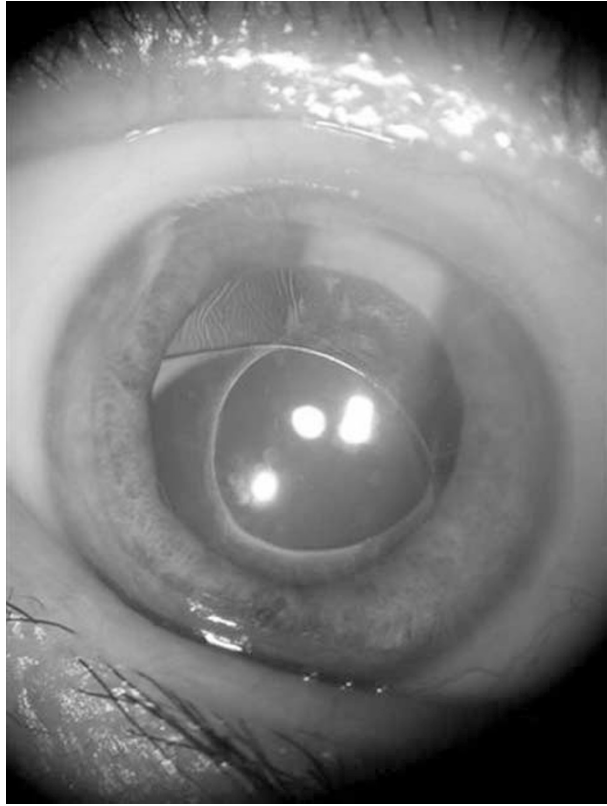


Figure 1 Slit-lamp photograph showing inferior decentration of the optic similar to sunset syndrome. Note that the capsulorrhexis remains centred in the visual axis.

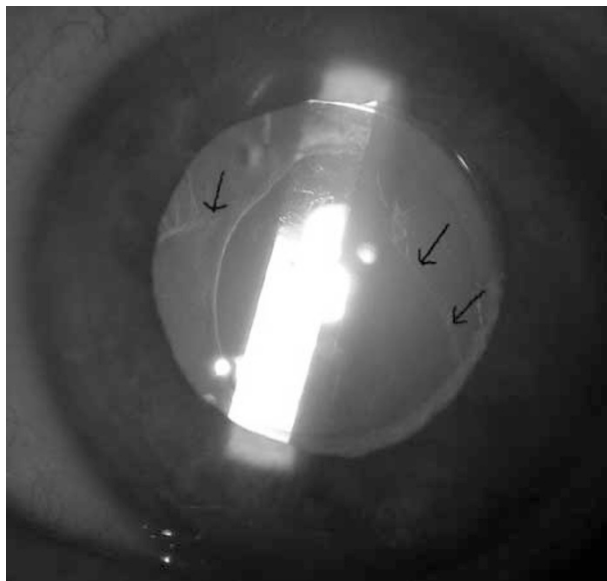


Figure 2 Slit-lamp photograph showing the optic recentered on postoperative day 1. The capsulorrhexis now appears concentric with the optic. Arrows indicate the previous position of the decentred optic.

To reduce the risk of decentration, we recommend a capsulorrhexis diameter smaller than the optic, visual confirmation of optic–haptic separation, and centration of the optic within the capsular bag at the conclusion of surgery.

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