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Sir,
Severe inflammation following iris fixated anterior chamber phakic intraocular lens for myopia

Though studies have shown that there is no statistically significant endothelial cell loss after iris fixated phakic intraocular lens implantation,¹ complications encountered include pigment dispersion, lens deposits, pupil ovalization, pupil decentration, uveitis, and chronic inflammation.² We present a case where the patient developed severe inflammation confined to the intraocular lens.

Case report

A 26-year-old lady underwent iris fixated phakic intraocular lens implantation (Verisyse, AMO) under general anesthesia on 29th October 2004 for an error of -18 diopters in the right eye. She had a central corneal thickness of 412 μm in the right eye and the anterior chamber depth from the epithelium was 3.6 mm. Specular microscopy revealed a cell density of 2638 cells per sq. mm. The optic of the lens measured 5 mm and had a power of -17 diopters. The procedure was done with Healon GV.

On post-op day 1, she had an unaided visual acuity of 20/25 in the right eye. The lens was in place and the eye was quiet. She was started on Betamethasone 0.1% eye drops six times a day and 0.3% Ofloxacin eye drops four times a day. She presented 3 days after surgery with irritation in the right eye. She did not have any other symptoms. The visual acuity was 20/25 and showed 1+ flare with pigments over intraocular lens. There

was no conjunctival injection or lid oedema noted. The steroids were changed to 1% prednisolone acetate eye drops 3 hourly. She was followed up closely over a period of one week during which the clinical features were stable. At 1 week after surgery, she complained of diminution of vision along with mild pain. Her visual acuity had dropped to 20/60. There was ciliary congestion and a fibrin coagulum (Figure 1a) on the intraocular lens, which was confined to the intraocular lens but was not involving the enclavated iris. There was a trace hypopyon. The Peripheral iridotomy was patent. The posterior pole of the fundus was normal. She was admitted and was prescribed 1% prednisolone acetate eye drops 1 hourly and 2% homatropine eye drops 8 hourly. On the next day, the anterior chamber showed 4+ cells and flare. The hypopyon had increased. She was prescribed 1% prednisolone acetate eye drops every 1/2 hourly, 0.3% ciprofloxacin eye drops 1/2 hourly along with 1% atropine eye drops three times a day. The next day, her vision had dropped

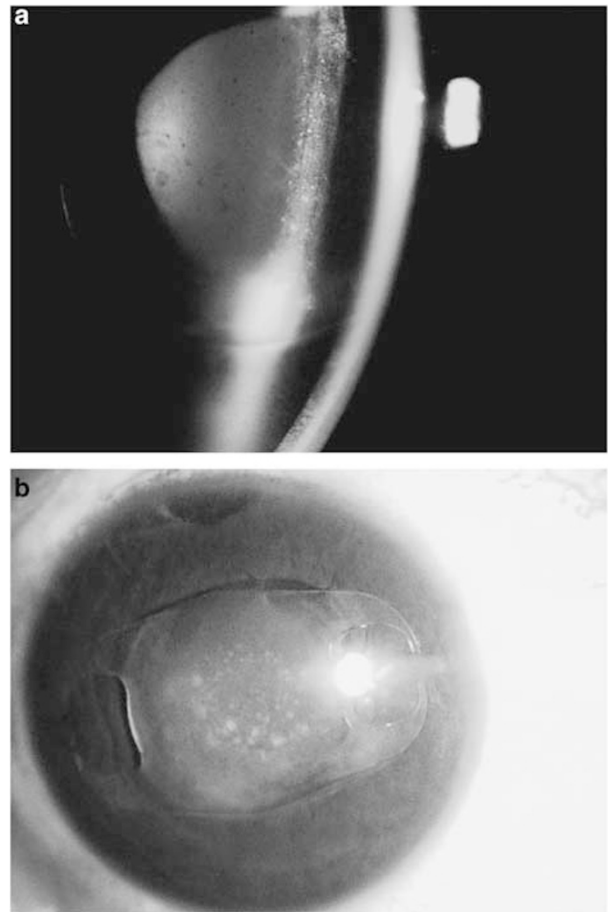


Figure 1 (a) Diffuse slit lamp view showing fibrin coagulum on the intraocular lens. (b) Diffuse slit lamp view after initiation of steroid therapy showing focal infiltrates.

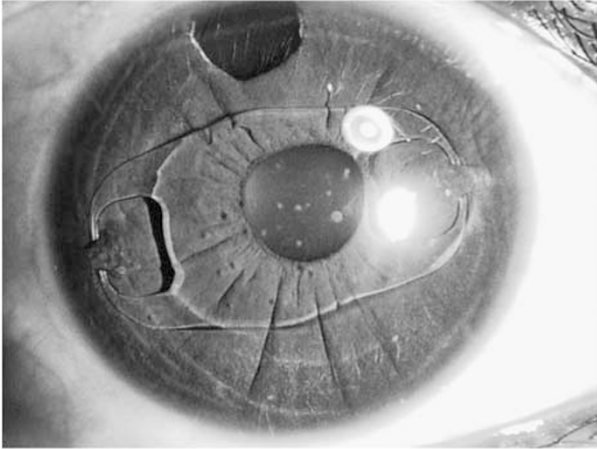


Figure 2 Slit lamp view at last follow-up showing a quiet eye and complete resolution of the fibrin coagulum.

further to counting fingers at 2 m. There were fine KPs on the endothelium. The coagulum appeared retracted but was covering both sides of the lens (Figure 1b). She was continued on the same treatment and the membrane progressively retracted. The intraocular pressure remained normal. The steroid drops were tapered. She was last seen 5 weeks after surgery, when she had an unaided visual acuity of 20/40 in the right eye and the best corrected visual acuity of 20/30 with correction. The eye was quiet and the fibrin coagulum had completely retracted. There were a few pigments on the intraocular lens (Figure 2).

Comment

Since iris supported model of intraocular lens is fixated directly to the iris tissue, causing pressure or shear forces when the eye is moving, chronic inflammation is a concern. Studies using iris angiography have shown no leakage of the iris vessels.^{3,4} Studies using laser flare cell meter revealed diverging results. Fechner *et al*⁴ showed no elevated flare levels in 109 eyes with at least 12 months of follow-up. Perez Santonja *et al*⁵ found elevated flare levels compared to normal population in 30 eyes at 12, 18, and 24 months after surgery. In all of the studies, clinically relevant inflammation could only be detected in individual cases. Careful monitoring of inflammation following surgery is necessary.

We present this case to highlight that severe inflammation can follow iris fixated phakic intraocular lens for myopia. The interesting feature of this case was that the severe inflammation with fibrin and a

coagulum, which became focal was found on the intraocular lens with iris tissue absolutely spared suggesting that the inflammation was sterile. We decided not to explant the lens and continue on intensive steroid therapy. In case, if similar cases are encountered, the patient can be monitored closely and treated with steroids thus delaying surgical intervention.

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Sir,
Unilateral papilloedema with transient visual obscurations

Unilateral optic disc swelling is most frequently caused by a local optic nerve or intraocular pathology. We present a case of unilateral disc swelling secondary to