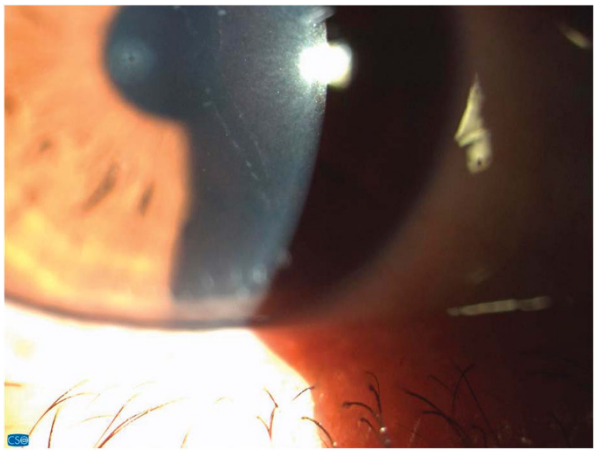

Figure 1 Anterior segment photograph of the right eye, showing snailtrack-like corneal changes.

with mitomycin C augmentation. Two months postoperatively, the right visual acuity (RVA) was 6/6, but the intraocular pressure (IOP) had risen to preoperative levels. Bleb needling was performed, with subconjunctival injection of 5-FU at 2 o'clock and 10 o'clock to the bleb. One week later, RVA was 6/7.5. New snailtrack-like corneal changes were noted in this eye (Figure 1), whereas the left cornea remained entirely normal. Six months after bleb modulation, the patient's IOP has improved but the unilateral corneal changes persist.

Comment

Corneal 'snailtracks' (white-grey streaks at the level of the corneal endothelium), may act as markers of endothelial cell damage.[1] Subconjunctival injection of 5-FU in proximity to the bleb following glaucoma filtration surgery is commonly employed to sustain good IOP control postoperatively. However, 5-FU has toxic effects on the corneal endothelium in animal studies.[2] Uncomplicated subconjunctival injections of 5-FU are unlikely to harm the endothelium, as drug concentrations in the anterior chamber after injection remain low.[3] However, case reports describe potential endothelial damage following inadvertent passage of 5-FU into the anterior chamber.[4] Although corneal oedema is a recognised manifestation of such toxicity, the appearance of snailtrack-like corneal changes has not previously been reported. We hypothesise that snailtracks seen clinically would appear as dark, excavated lines on the corneal endothelium on specular microscopy, corresponding to linear ruptures of endothelial cells as seen in certain corneal dystrophies. Compromised endothelial cell function may lead to increased propensity to develop corneal oedema on exposure to provoking factors. Our finding leads us to support the view of Khaw *et al*,[5] who in a letter to *Eye* some years ago, advised caution when injecting 5-FU directly into the bleb. The authors raised concerns about the potential for 5-FU to enter the anterior chamber via a patent sclerostomy. We would also caution against injecting directly above the bleb, where the effects of gravity may encourage downward flow of 5-FU directly into the anterior chamber, and would advise injecting lateral to the bleb instead. Our patient provides a good example of the potential consequences of unintentional intraocular exposure to 5-FU, and reminds clinicians of the possible complications of this technique of bleb revision.

Conflict of interest

The authors declare no conflict of interest.

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Sir,

Intraocular lens opacification mimicking the appearance of a congenital lamellar cataract

Cataract surgery has advanced owing to increasing biocompatibility of newer materials. Complications involving the clarity of intraocular lenses (IOLs) exist in literature and include most of the IOL types.[1–3] We present a unique case of IOL opacification reminiscent of a congenital lamellar cataract.

Case report

An 81-year-old woman presented with 6-month history of cloudy vision in her left eye (LE). Her best-corrected visual acuity (BCVA) was 6/9 (RE) and 6/18 (LE). She underwent uneventful bilateral phacoemulsification 8 years previously with a foldable hydrophilic acrylic IOL (HA60-OUV, Suncoast Ophthalmics, Clearwater, FL, USA) in the LE. No information was available regarding the right IOL.

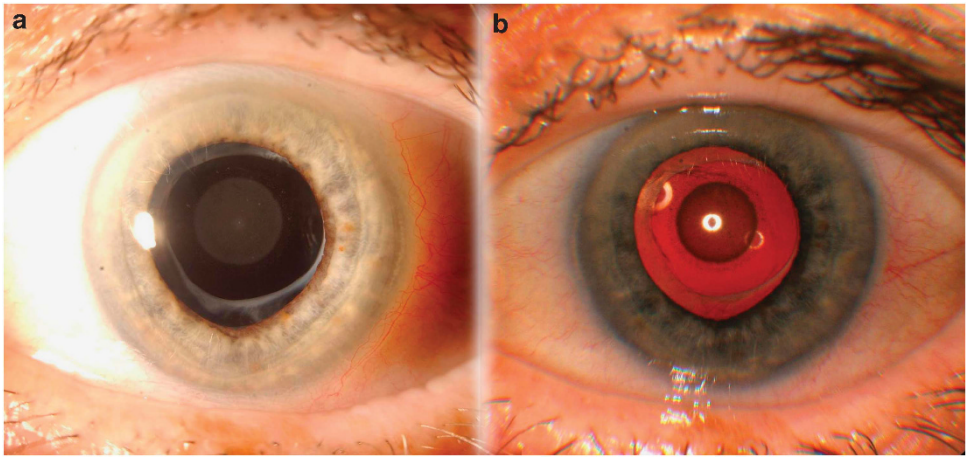

Figure 1 (a) and (b) Pseudophakic lamellar opacification. Note the central location of the opacity with the surrounding pulverulent-like changes, best seen in retroillumination.

On examination, there was bilateral posterior capsular opacification. The LE was treated with YAG-laser capsulotomy, improving BCVA to 6/9. RE received no treatment. Central opacification in the lens optic reminiscent of lamellar cataract was subsequently observed in the LE (Figures 1a and b). The patient remained asymptomatic, maintained good near vision (N5) and normal contrast sensitivity. All other clinical findings were unremarkable.

Comment

The SC60-OUV intraocular lens produced by Medical Developmental Research is a hydrophilic acrylic lens composed of poly-(2-hydroxyethyl methacrylate-(HEMA)) and PMMA with a polymerisable ultraviolet absorber. Distribution reached Europe with various commercial names including Suncoast as in our case. Production ceased in 2000 following reports of IOL opacification.[4–7] The majority of the reported cases of IOL opacification required surgical replacement. However, this was not necessary in our case.

Studies consider varying degenerative theories. Werner *et al*[6] describe calcified granular deposits in hydrophilic acrylic IOLs deep in the lens optic with clear zone under the surface of the IOL, similar to our case. Werner *et al*[7] also found calcium/phosphate deposits with element silicon and silicon compounds in extracted hydrophilic lenses. Moosavi *et al*[4] suggested slow degradation of the polymer matrix and swelling of incompletely polymerized material in the optic core resulting in damage to the HEMA component of the IOL.

Most reports describe diffuse opacities leading to visual deterioration.[5,6] In our case, dense lens opacification occupied a concentric zone of the IOL, surrounded by dust-like satellite opacities in the outer zone, leaving a clear zone under the surface. This gave a unique appearance akin to paediatric lamellar cataract but no visual compromise 8 years after surgery, compared with reports of symptomatic IOL opacification occurring 6–24 months postoperatively.[4–6]

Late-onset IOL opacification can occur. Long-term follow-up is advisable before any conclusions are drawn regarding biocompatibility of hydrophilic acrylic IOLs.

Conflict of interest

The authors declare no conflict of interest.

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Sir,

A case of post-vaccination optic neuritis: coincidence or causative?

We wish to address our article *'Retrobulbar optic neuritis after Hepatitis A vaccination in a HIV-infected patient'*,[1] in which we suggested a temporal association between Hepatitis A vaccination and optic neuritis. The patient's subsequent progress is shown in Figure 1. As our patient sero-converted after the first dose, he did not receive further Hepatitis A or other vaccinations during the follow-up period.

He was diagnosed with multiple sclerosis (MS), 3 years after the occurrence of optic neuritis. We now feel that the initial two events are more likely coincidental than causative.

Since our earlier article, case reports continue to suggest an association between vaccination and optic neuritis.[2,3] Larger studies, however, are still unable to establish a definite link. Besides those mentioned previously, Liang *et al*[4] recently reported the occurrence of three cases of optic neuritis in the post-marketing surveillance of 89.6 million doses of Influenza A (H1N1) vaccine in China, between September 2009 and March 2010, and concluded that there was no observable pattern of adverse events after the administration of influenza A (H1N1) vaccine. One caveat of this study is the passive reporting of adverse events making underreporting likely. Despite this, the incidence of optic neuritis (post-vaccination) is 0.003 cases per 100 000 doses, much lower than the rate of 0.89 per 100 000 for optic neuritis in Singaporean Chinese.[5]

On longer follow-up of this patient, it appears that the two events are more likely coincidental. We feel that patients who develop post-vaccination optic neuritis should be followed up as they may develop demyelinating syndromes years later.

Conflict of interest

The authors declare no conflict of interest.

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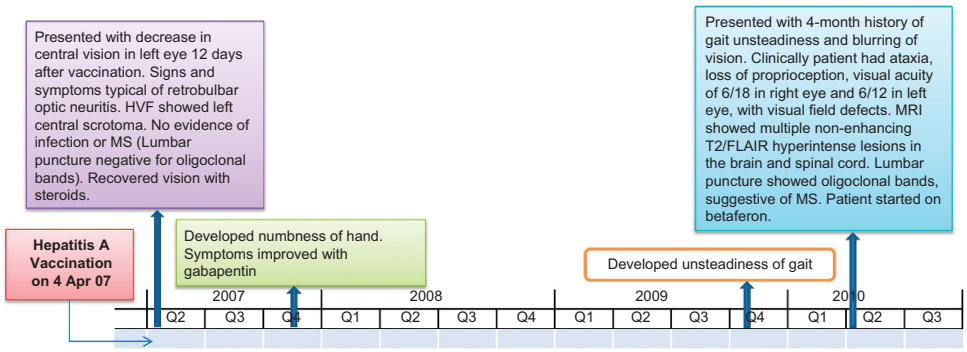

Figure 1 Timeline of events of patient.