Periocular migration of an intraocular lens

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Abstract
A woman presented with a painful eye 6 weeks after cataract extraction and intraocular lens implantation. In the past she had had a sector iridectomy for iris bombe caused by chronic anterior uveitis. On examination the three central corneal sutures were absent, whilst the medial and lateral sutures had broken and were protruding from the section. The eye was quiet and the section intact. Combined clinical and ultrasound examination failed to locate the intraocular lens. Four months postoperatively, while being fitted for contact lenses for the correction of aphakia, the intraocular lens appeared from the superior fornix.

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A recent report documented six cases of periocular migration of hard contact lenses. The authors stated that this phenomenon was not particularly unusual despite being largely unreported. A rather more unusual case is reported here. The patient had been referred to the contact lens department in order to correct aphakia. At the second contact lens fitting, 4 months after cataract extraction, an intraocular lens unexpectedly appeared from under the upper fornix.

Case report
A 49-year-old woman presented to the accident and emergency department 6 weeks following a right cataract extraction and implantation of a posterior chamber intraocular lens (IOL). She gave a 5 day history of watering and a foreign body sensation in the right eye.

She had a long history of bilateral chronic granulomatous anterior uveitis dating from 1976 which had for several years required treatment with oral prednisolone. In 1980 she developed iris bombe with a rise in pressure for which broad iridectomy was performed. For 10 years she remained symptom free, but re-presented in June 1990 with a further flare up of uveitis. At this stage the vision in her right eye was 3/60, which was thought to be mainly due to a large posterior subcapsular cataract. Eventually in August 1991 a right cataract extraction was carried out under local anaesthesia. There were dense adhesions between the pupil and lens inferiorly and the operation was complicated by zonule rupture superiorly with prolapse of vitreous. An anterior vitrectomy was performed through the area of zonule dehiscence and a 20-5 dioptre one-piece IOL with angled haptics was inserted into the ciliary sulcus without further complication. Two days postoperatively the IOL was noticed to be decentred super-temporally where it remained on review at her first post-operative visit 1 week later. At this stage the right visual acuity was <6/60 unaided, 3/24 with a pinhole. There was some posterior capsular opacification and probable macular oedema.

When examined in the accident and emergency department the visual acuity in the right eye was 2/60. The three central sutures were missing and the most medial and lateral were protruding out of the section, which itself was secure – the Seidel test being negative. Figure 1 shows the corneal wound after removal of the sutures. The conjunctiva was not inflamed, and the cornea was clear with old keratic precipitates. There were only a few cells in the anterior chamber. Vitreous was in the anterior chamber but not adjacent to the section. The posterior capsule was absent. There were a few pigmented cells in the vitreous, and the retina was flat with slight macular and disc oedema. The intraocular pressure (IOP) was 16 mm Hg. An ultrasound examination was performed which failed to locate the IOL. Three months postoperatively the patient was referred to the contact lens department for the fitting of a contact lens. She was able to see 6/36 with the aid of a +11.5D lens. One month later she was re-examined. On both occasions her upper eyelid had been everted without comment, but during the course of instruction to remove her contact lens the missing intraocular lens re-appeared (Fig 2).

Discussion
While cases of missing contact lenses reappearing from under the upper eyelid are by no means rare, I believe this is the first reported case involving an intraocular lens. I also believe it to be the first reported case of a self-sealing wound following IOL expulsion. The patient initially presented to a bemused casualty officer with three sutures missing, two broken sutures, no IOL, and a quiet eye despite her long-standing previous history of uveitis. Despite repeated examination and sophisticated ultrasound imaging, it was assumed that the lens lay adjac-
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ent to the pars plana and ciliary body. Eyelid eversion in the presence of an incompletely healed wound was not attempted and the location of the missing implant high in the superior fornix was not detected.

Unusual features of the case were the self-sealing wound and the absence of attendant intraocular inflammation. It is recognised that, in the presence of even partial rupture of the posterior capsule, the lens position may be more unstable. The implant was noted to be decentred superiorly 1 day postoperatively. Furthermore, a broad iridectomy had previously been performed, so that when the intraorbital pressure was raised during a bout of vomiting expulsion of the IOL occurred.

Dislocation of a posterior chamber lens relative to its normal position behind the iris is one of many complications of cataract surgery. It may rarely fall backwards into the posterior chamber. More frequently, the pupil margin is caught behind the implant resulting in gross distortion of the pupil shape. One of the most unusual complications is expulsion of the implant. This almost always occurs in the context of obvious ocular trauma and is associated with other signs of ocular injury. For example, in a previously reported case of posterior chamber lens expulsion, blunt trauma in the form of a dog paw was cited. This case was associated with vitreous prolapse and retinal detachment.

The case reported above was unusual for both the expulsion of the IOL and the lack of ocular inflammation. The subsequent location of the implant in the superior fornix was extraordinary!
