removed through an enlarged incision and replaced with a rigid PMMA lens. The post-operative period was uneventful and the final best-corrected acuity was 6/6.

The semi-opaque AcrySof IOL was kept dry in its packaging at room temperature until the end of the operating list, approximately 3 h later. On inspection under the operating microscope, the lens was then noted to be clear and no other abnormality was found.

Comment

Transient fogging of the AcrySof IOL is a rare complication which we have noted on two occasions. Each time, a decision was made to remove the lens and replace it with a rigid PMMA lens. This was performed without complication through a 6.5 mm incision. The fogging of the IOL was not present on subsequent examination some hours later. We are not aware that this complication has been described before.

Clinically insignificant glistenings have previously been described with the AcrySof IOL.[6] However, these glistenings were late features, noted a week after surgery or after 48 h in laboratory conditions. Although the lens packaging was implicated, temperature fluctuation was most closely linked to the formation of glistenings. The glistenings were believed to occur as a consequence of microvacuole formation within the lens polymer as the temperature is raised beyond the glass transition temperature. Water, from the anterior chamber or the lens packaging system, was then able to enter these vacuoles within the polymer and cause the glistenings due to the different refractive indices of water and the lens polymer. Further support for this theory was provided by the observation that the glistenings disappeared after the lenses studied under laboratory conditions were dried.[6]

At the time of the transient fogging of the AcrySof lenses documented here, our policy had been to warm the lenses in a heating cupboard prior to opening. Each lens was inspected prior to folding and introduced into the eye dry. The fogging was noted soon after the lenses were unfolded in the eye. After removal and dry storage in the original lens case, neither lens was found to show any residual fogging or abnormality. We believe that in our cases the acrylic lenses developed glistenings because of temperature changes caused by warming and subsequent hydration on insertion into the eye. They subsequently became clear after removal because of dehydration.

Since these two cases, our policy has now changed and lenses are stored at room temperature or else in the pocket of a theatre nurse, close to 37°C. No similar complications have been noted since then. This is in keeping with the manufacturer's recommendation that the storage temperature should not exceed 45°C.[3] If stored above this recommended temperature, the acrylic material may develop glistenings due to microvacuole formation.[6]

Each of the fogged lenses cleared spontaneously when removed from the eye and stored dry. It is not known whether the lenses would have cleared if left in the anterior chamber. Our observations led us to believe that this is unlikely and we would recommend removal of a fogged lens during primary surgery. However, correct storage of the lens and warming at a temperature not exceeding body temperature should prevent this complication.

References

1. Kohnen T. The variety of foldable intraocular lens materials. J Cataract Refract Surg 1996;22(Suppl 2):1255–8.
2. Milazzo S, Turut P, Blin H. Alterations to the AcrySof intraocular lens during folding. J Cataract Refract Surg 1996;22(Suppl 2): 1351–4.
3. Product Information, Alcon Laboratories, Inc: AcrySof.
4. Oshika T, Shiokawa Y. Effect of folding on the optical quality of soft acrylic intraocular lenses. J Cataract Refract Surg 1996;22(Suppl 2):1360–4.
5. Pfister DR. Stress fractures after folding an acrylic intraocular lens. Am J Ophthalmol 1996;121:572–4.
6. Omar O, Pirayesh A, Mamalis N, Olson RJ. *In vitro* analysis of AcrySof intraocular lens glistenings in AcryPak and Wagon Wheel packaging. J Cataract Refract Surg 1998;24:107–13.
7. Shugar JK. Implantation of AcrySof acrylic intraocular lenses. J Cataract Refract Surg 1996;22:1355–9.

M. McKibbin ✉
R.R. Seemongal-Dass
P.L. Atkinson
Bradford Royal Infirmary
Duckworth Lane
Bradford BD9 6RJ
West Yorkshire, UK
Tel: +44 (0)1274 364 116

Sir,

Pre-operative hyphaema in Fuchs' heterochromic uveitis

Lens opacities are common sequelae of Fuchs' heterochromic uveitis and there has therefore been much experience of cataract extraction in this condition. We report a case where cataract surgery using a peribulbar block had to be abandoned after the pre-operative use of the Honan balloon, because of significant hyphaema and hypotony.

Case report

A 50-year-old moderately myopic woman had been followed for left-sided Fuchs' heterochromic uveitis for 10 years. Five years after diagnosis she began to develop a raised intraocular pressure with associated disc cupping, which was treated with a topical beta-blocker and topical carbonic anhydrase inhibitor. The pressure was easily controlled on this combination of treatment, and the fluctuating inflammation was treated with intermittent courses of topical steroids. Ten years after diagnosis she began to complain of blurred vision in the

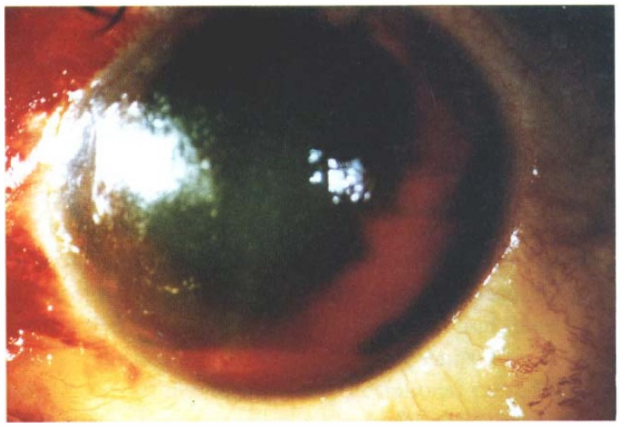

Fig. 1. *The appearance of the eye showing blood in the anterior chamber after removal of the Honan balloon.*

left eye, secondary to the development of posterior subcapsular cataract. A decision for cataract surgery was therefore made.

Immediately pre-operatively she was noted to have old keratic precipitates, a quiet anterior chamber, a well-dilated pupil after pre-operative mydriatics and a normal intraoperative pressure. The drainage angle was also normal. Peribulbar anaesthesia was administered with 2% lignocaine with adrenaline, marcaine 0.5% and hyalase – a volume of approximately 5 ml. Pressure was applied with a Honan balloon for approximately 10 min.

When the patient was brought to the operating table a significant amount of blood was noted in the anterior chamber, distributed mainly around the angle (Fig. 1) and the eye was markedly soft. The procedure was abandoned as an ocular perforation could not be completely excluded. Subsequent slit-lamp examination showed blood and fibrin in the anterior chamber, not appearing to come through the pupil. The intraocular pressure was 4 mmHg. An ultrasound scan showed very little if any blood in the posterior segment. Over subsequent days, as the hyphaema settled, the retina was visualised and a retinal break suggestive of accidental globe puncture during anaesthesia was excluded. Two days later the patient had an acute rise in intraocular pressure to 54 mmHg, which settled slowly on medical treatment. She underwent cataract surgery some weeks later using a retrobulbar anaesthetic, with a good result, without the use of the Honan balloon.

Comment

Fuchs' heterochromic uveitis (FHU) accounts for at least 3.2% of all cases of uveitis.[1] It is usually seen in one eye of young adults, with heterochromia of the iris, and a low-grade uveitis with anterior chamber activity and keratic precipitates but without ciliary injection. Lens opacity is seen frequently and glaucoma slightly less often,[2] and consequently the safety of cataract extraction in FHU has been the subject of many papers. Generally speaking, the surgical outcome is felt to be better in this condition than in eyes with other types of uveitis, but eyes with FHU are prone to specific complications. Problems reported include hyphaema post-operatively and after paracentesis[3] with its associated drop in intraocular pressure, post-operative pressure rises, uveitis and vitreous opacity limiting visual outcome.[4] Although hyphaema has frequently been reported with procedures that open the anterior chamber (paracentesis, cataract surgery), and even with applanation tonometry, mydriasis and gonioscopy,[3] there has been only one previous report of hyphaema after the use of the Honan balloon,[5] and in that case it was possible to proceed with the operation as the hyphaema was small and the eye normotensive. To date there have been no comments in the literature as to whether the route of administration of local anaesthetic (peri- or retrobulbar) has an influence on the incidence of hyphaema.

The cause of the frequent hyphaema is not clear, and although abnormal angle vessels have been described in some cases of FHU there is no link between gonioscopic or histopathological findings and the occurrence of hyphaema.[6] A generalised vascular structural abnormality is assumed in these eyes, causing a usually small haemorrhage from the angle vessels or occasionally from the iris surface secondary to an abrupt change in intraocular pressure. Extensive haemorrhage as in this case is unusual, but reinforces the need for care in these eyes when using any means pre-operatively to reduce the intraocular pressure.

References

1. Dernouchamps JP. Fuchs' heterochromic cyclitis. Acta Ophthalmol 1984;163 (Suppl):49.
2. Jones NP. Fuchs' heterochromic uveitis: a reappraisal of the clinical spectrum. Eye 1991;5:649–61.
3. Jones NP. Fuchs' heterochromic uveitis: an update. Surv Ophthalmol 1993;37:253–72.
4. Jones NP. Cataract surgery in Fuchs' heterochromic uveitis: past, present and future. J Cataract Refract Surg 1996;22:261–8.
5. Feldman ST, Deutsch TA. Hyphaema following Honan balloon use in Fuchs' heterochromic iridocyclitis. Arch Ophthalmol 1986;104:967.
6. Goldberg MF, Erozan YS, Duke JR, *et al.* Cytopathological and histopathological aspects of Fuchs' heterochromic iridocyclitis. Arch Ophthalmol 1965;75:604–9.

Tamsin J. Sleep ✉
I.H. Chisholm
Southampton Eye Unit
Southampton General Hospital
Tremona Road
Southampton SO16 6YD, UK

Sir,

Self-induced cicatricial conjunctivitis

Cicatricial conjunctivitis is an uncommon condition characterised by pseudomembrane formation, conjunctival inflammation and scarring. The differential diagnosis includes ocular cicatricial pemphigoid, Stevens Johnson syndrome, chemical burn, bacterial and viral conjunctivitis and drug-induced conjunctivitis.[1] There has been one previous report[2] of severe cicatricial conjunctivitis caused by repeated self-induced trauma, by a patient who readily admitted to an obsessive-compulsive disorder. We report a similar case in a