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Sir,

The surgical outcome and personality change in a child with congenital cataract after multifocal intraocular lens implantation

A 7-year-old girl first presented in January 2007 with bilateral cortical cataract combined with high hyperopia and astigmatism. The refractions were +3.75 spherical diopter (DS)/−1.75 diopter of cylinder (DC) ×175 in the right eye (OD), and +4.25 DS/−2.25 DC ×170 in the left eye (OS). The best-corrected visual acuity (BCVA) was 20/32 in either eye (OU). Spectacles correction and CAM vision-stimulator treatment once a week were prescribed, and BCVA in OU reached 20/25 after 5 months. However, the cortical opacity (OU) aggravated gradually. As the BCVA decreased to 20/40 OD and 20/70 OS in January 2009, bilateral simultaneous phacoemulsification with multifocal IOLs-Tecnis MF (ZM900, AMO) implantation OU was performed in February. The refractions were +1.25 DS/−2.25 DC ×170 OD and +1.0 DS/−2.75 DC ×175 OS 4 weeks after surgery, and the BCVA was 20/30 OU. New spectacles were prescribed and 6 months later the BCVA reached 20/20 OU without performing the CAM treatment after surgery.

According to the statement of the parents, the girl had become introverted and shrinking while vision decreased. However, the girl is vigorous now and is willing to participate in outdoor activities. The Children's Visual Function Questionnaire (CVFQ) developed by Felius *et al* is an instrument designed for parents of children aged ⩽7 years to assess the influence of children's visual disorders on themselves and on their families.[1] The CVFQ was filled by the girl's parents before and 6 months after surgery, and the CVFQ total score and subscale scores represented better results (higher scores) after surgery, except for the general health subscale (Table 1). We thought that in the assessment of cataract in children, not only the visual acuity but also the quality of children's life is the concern at the time of surgical intervention. In recent years, new surgery techniques, designed IOLs, and IOL materials have proved to yield good results in senile cataract surgery.

Table 1 The subscale scores of the Children's Visual Function Questionnaire

	Pre-operation	*Post-operation*
General health	0.75	0.75
General vision	0.2	0.4
Competence	0.6	0.95
Personality	0.89	0.97
Family impact	0.25	0.54
Treatment	0.25	0.75
Total score	0.54	0.82

These advances have also increased the success rate of cataract surgery in children.[2,3] In this case, the cataract extraction and multifocal IOL implantation were successful in treating the amblyopia and in reshaping the patient's personality.

Conflict of interest
The authors declare no conflict of interest.

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Sir,

Myopic pre-foveoschisis: an earlier stage of myopic foveoschisis documented by optical coherence tomography

Myopic foveoschisis (MF) occurs in 9–34% of highly myopic staphylomatous eyes,[1–3] which may be associated with or may progress to foveal detachment or macular hole, which in turn are associated with decreased visual

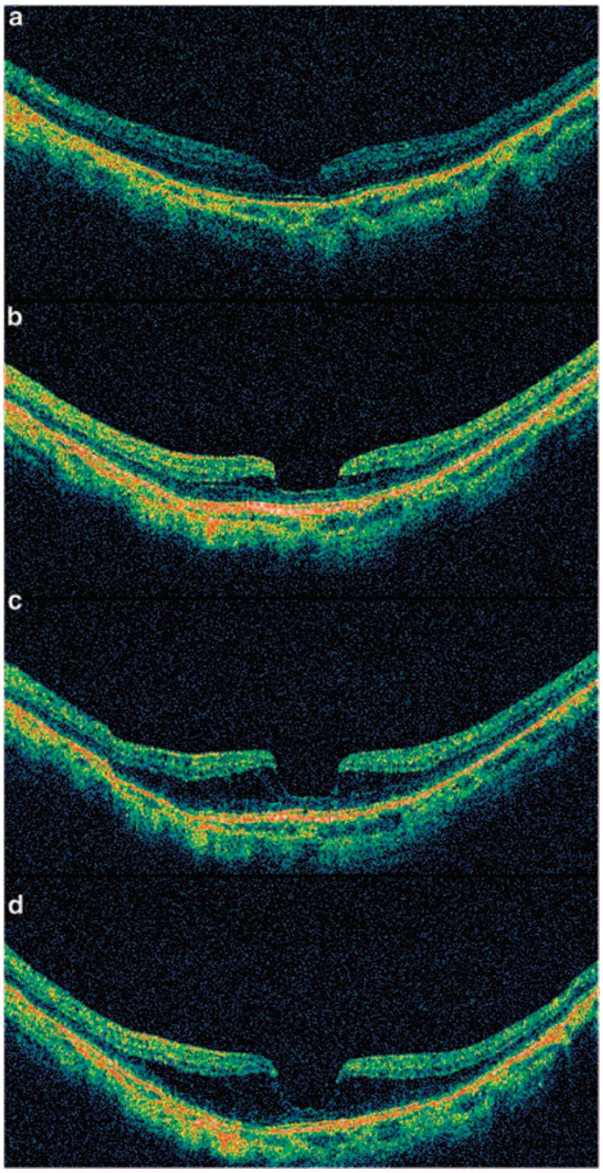

Figure 1 A 60-year-old lady with a bilateral high myopia of −6 D spherical equivalent presented with right myopic foveoschisis (MF) and foveal detachment. Her left eye was asymptomatic at presentation. (a) Optical coherence tomography (OCT) (horizontal section) of her left macula at presentation showed a steepened foveal contour in a posterior staphylomatous eye with a normal central retinal thickness (CRT) of 159 μm. Her left VA was 6/6 with normal fundus examination. (b) Two years later, her left eye remained asymptomatic with a VA of 6/7.5. OCT performed 2 years later showed a cleft in the outer plexiform layer at the nasal and temporal parts of the fovea, and elevation of the inner retina, with increase in CRT to 189 μm. (c) One year later, the eye was still asymptomatic with a VA of 6/7.5. OCT of the left macula showed classic MF with a CRT of 275 μm. (d) OCT of the left macula performed 3 months later showed progression of the MF, with CRT increasing to 303 μm.

acuity (VA).[1,2] Therefore, early detection of MF is important before progression. However, the earlier stage of MF has not been described before.

We present one case of a highly myopic eye that had normal retinal findings at presentation before it progressed to the myopic pre-foveoschisis stage, and to MF over a 3-year duration.

Case report

A 60-year-old lady with a bilateral high myopia of −6 D spherical equivalent developed a decreased right VA of 6/21 secondary to MF with foveal detachment. At presentation, her left eye was asymptomatic with a VA of 6/6, with normal fundus examination and optical coherence tomography (OCT) showing posterior staphyloma, steepened foveal contour, and a normal central retinal thickness (CRT) of 159 μm (Figure 1a).

Two years later, her left eye was asymptomatic with a VA of 6/7.5. However, OCT showed the stage of MF as evidenced by a cleft in the outer plexiform layer at the fovea (Figure 1b), and anterior elevation of the inner retina, with an increase in CRT to 189 μm.

One year later, the eye remained asymptomatic with a VA of 6/7.5. However, there was established MF. The CRT was 275 μm (Figure 1c), which further increased to 303 μm 3 months later (Figure 1d).

Comment

Our case report illustrates the stage of myopic pre-foveoschisis preceding MF. At presentation, OCT showed steepening of the foveal contour in a posterior staphylomatous eye. Two years later a cleft developed at the fovea, suggesting early separation of the inner and outer layers at the inner part of the outer plexiform layer of the retina, while CRT remained within normal limits.[4] These OCT images show the splitting of the two layers that was initiated at the fovea. The pathogenesis of MF is postulated to be due to retinal stretching from posterior staphyloma and vitreomacular traction, but has not been shown to start at the fovea.[1–3]

Patients with high myopia and unilateral MF may be followed up with OCT for the contralateral eye to assess the progression to myopic pre-foveoschisis and MF.

Conflict of interest

The authors declare no conflict of interest.

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Sir,

Serious spinal sequelae following the use of eye drops

The recently updated NICE glaucoma guidelines[1] highlight the need for explaining to patients the technique of how to instil an eye drop. In an attempt to elevate the cornea away from the lower lid to reduce the chance of the dropper touching the cornea, we often ask our patients to look up. This movement may hyperextend their neck and atlanto-occipital joints.

We report a case of significant neck damage following the use of eye drops. A 67-year-old gentleman was diagnosed with glaucoma and commenced on Latanoprost (Xalatan, Pfizer) eye drops. Five days later he experienced numbness and paraesthesia in his hands, which continued for 6 months. A neurological examination showed brisk upper limb reflexes and an extensor plantar response consistent with an upper motor neurone lesion. Subsequent spinal MRI (Figure 1) showed severe degenerative change between C3/4 and C6/7 with compression of the cord (cervical spondylosis with myelopathy). The patient was advised to avoid neck hyperextension when instilling his drops. On subsequent neurosurgical review 2 months later, his symptoms had settled and no surgery was required.

Figure 1 MRI spine showing severe degenerative change between C3/4 and C6/7 with compression of the cord (cervical spondylosis with myelopathy).

Nucci *et al*[2] have previously reported a case of atlanto-axial dislocation caused by administration of eye drops in a child with Down's syndrome. This case report suggests that we should also perhaps explain to patients that there is no need to forcefully hyperextend the neck, as drops can effectively be instilled without such neck movement. Gentle lower lid retraction can help avoid the bottle contacting the eye, as this can result in contamination of the bottle contents.

Rather than asking our patients to 'look up', we should consider asking, 'keep your head still and with your eyes only look up', perhaps with a helper's gentle hand support on the back of their head to avoid neck hyperextension. Patients can also try the semi-recumbent position to aid drop application, or, alternatively, their carers can instil the drop.

Patients with musculoskeletal problems do require eye healthcare professionals to assess their needs in a holistic manner in order to aid concordance with long-term topical therapy, and to reduce the risk of serious spinal sequelae.

Conflict of interest

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Sir,

A novel technique for removal of inadvertent subretinal perfluorocarbon liquid after complex retinal detachment surgery

Perfluorocarbon liquid (PFCL) is commonly used in the surgical management of complicated retinal