

anti-toxoplasma therapy. In four of the six cases, improvement was noted after steroid injection and in two cases deterioration was noted.<sup>8</sup>

Our patient was given oral corticosteroid initially with clinical improvement. A decision for 4 mg IVTA was made to attempt to reduce the inflammatory response and reduce macula damage. This was covered by anti-toxoplasma medication following a positive serology 1 month later. There was further clinical improvement followed by a fulminant, rapid reaction leading to a vitrectomy with silicone oil to help preserve the eye cosmetically rather than for any visual recovery. In the past, histological examination has been undertaken in toxoplasmosis-affected eyes treated with corticosteroids alone. Necrosis was seen in areas where there were numerous free parasites without an inflammatory reaction.<sup>2,5</sup>

There is clearly a role for corticosteroids in the treatment of ocular toxoplasmosis under the cover of antiparasitic drugs, especially in the elderly or those with evidence of a primary infection.<sup>9</sup> However, we feel that the administration of low dose IVTA in our patient was detrimental to the control of the ocular toxoplasmosis and urge extreme caution in taking this approach.

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#### Sir, Intraoperative floppy-iris syndrome associated with chronic use of chlorpromazine

I would like to comment on the above correspondence by Ünal *et al.*<sup>1</sup> The authors conclude that 'discontinuation of chlorpromazine might be a wise course of action before cataract surgery to avoid the possibility of IFIS'. I feel that such advice should not be given on the basis of a single anecdotal report.

Intraoperative floppy iris syndrome (IFIS) is characterised by subnormal preoperative pupil dilation, repeated intraoperative prolapse of a billowing, floppy iris, and progressive intraoperative miosis.<sup>2</sup> It was originally suggested that this was specific to patients on tamsulosin and not to other alpha blockers, however this and other reported cases suggest that IFIS may occur with all commercially available alpha-blockers (alfuzosin, doxazosin, tamsulosin and terazosin).<sup>3</sup> Osher<sup>4</sup> suggests that IFIS is a form of iris dystonia which can result from many different causes, one of which is flomax (tamsulosin), and can occur in both sexes with a highly variable degree of susceptibility and severity. IFIS may even occur without any identifiable causative factor.

Here, many questions spring to mind: why did this patient present with cataract at age 48. Had there been other significant disease, trauma or treatment? Was this a first or second eye operation? What was the experience with the other eye? Why did the patient require a general anaesthetic? Were there other factors expected to cause difficulties? What other medications had the patient used? Having been diagnosed with schizophrenia over 29 years ago the patient must have been exposed to various medications linkable to IFIS.

In conclusion I do not think it is wise to advocate cessation of chlorpromazine before cataract surgery. There is no mention of the risks attached to stopping a medication especially when it is used in controlling mental illness beyond most ophthalmologists area of expertise. Chlorpromazine is not an uncommon drug and has been in use for many years without prior report of this effect.

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Sir,

**Reply to: Intraoperative floppy-iris syndrome associated with chronic use of chlorpromazine**

Although intraoperative floppy iris syndrome (IFIS) may even occur without any identifiable causative factor, it was reported to be strongly associated with systemic  $\alpha$ -blocker use.<sup>1</sup> As stated in our report<sup>2</sup> the most probable cause for IFIS in a patient with chronic chlorpromazine use for 29 years should be the  $\alpha$ -receptor blocking activity of this drug.

Discontinuation of chlorpromazine before cataract surgery to avoid the possibility of IFIS may merit further discussion. Although chlorpromazine has the advantage of being an inexpensive drug, it is one of the oldest antipsychotics with well-documented adverse effects including orthostatic hypotension, high-resting pulse rates, and impotence. It has antagonistic effects on  $\alpha$ -1-adrenergic receptors, serotonin 5-HT<sub>2</sub> receptors, and dopamine D<sub>1</sub> and D<sub>2</sub> receptors.<sup>3</sup> Planning of cataract surgery in such a patient may create a chance of trying a new generation antipsychotic drug with less side effects. This should be done with psychiatry consultation. As highlighted in the report, it cannot be guaranteed whether the occurrence of IFIS would be prevented or not if chlorpromazine had been stopped before surgery. Disuse atrophy may have developed in this patient because of long-term use of the drug.

Several other issues raised by the author could not be mentioned in the original report because of limited number of words as per journal policy. Age-related changes in the lens result from multifactorial processes and increasing age is not the only and sole determinant of cataract development in the lens. The patient has a chronic mental illness. For instance, even nutritional factors related with the mental disease may also take place in the early development of cataract. We preferred general anesthesia because of recognition of low cooperation and the poor level of compliance to the instructions in the preoperative evaluation. The patient's history did not reveal any other systemic diseases, eye trauma, or previous ocular surgery.

In conclusion, this report suggests that chlorpromazine may be added to the list of drugs that may cause IFIS because of having  $\alpha$ -receptor blocking activities.

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Sir,

**Artificial iris rings**

Srinivasan *et al*<sup>1</sup> elegantly demonstrated the beneficial effects of the use of artificial iris rings in eyes with iris defect. It was interesting that Morcher type 50C was chosen in case 2, in which the patient developed a permanently dilated 7 mm pupil and cataract after traumatic injury. A pair of type 50C aniridic rings constructs an iris with pupil size of 6 mm, which is only 1 mm smaller than the pupil size of this particular eye, as showed in Figure 3f of the original article. One would presume that the use of the type 50D (4 mm pupil size) or type 50E (3.5 mm pupil size) would provide an even better improvement in the symptoms of glare and photophobia. Type 50D and 50E aniridic rings also appeared to be incorrectly labelled in Figure 1.

While the functional result of these aniridic rings has been well documented, their cosmetic result, which was not addressed in the paper, is often disappointing. Although some of these aniridic rings or implants (intraocular lens implant with a clear central optic and opaque peripheral segment) are available in colour such as blue and yellow, their appearance seems rather unnatural. Therefore, most surgeons will choose the black counterpart even in patients with light-coloured iris.

The same company (Morcher) has recently produced a custom-made iris match implant, which is made of PMMA and composed of a central 4 mm optic and a coloured peripheral segment with matching iris colour pattern to the residual iris of the same eye (type 30B). A colour chart is used by the surgeon to match the iris colour of the patient's eye. Human Optics/Dr Schmidt has produced another version called artificial iris, which is made of foldable, biocompatible silicone. It is custom-made with hand-crafted adjustment of the colour, structure, and diameter of the implant. It is implanted into the ciliary sulcus with or without suture fixation.