- 3 Helzner J. Managing floppy iris syndrome. Use of Flomax has been tied to this complication *Ophthalmol Manag* [serial online]. April 2005. Available at <http://www.ophmanagement.com/article.aspx?article=86311>. Accessed May 1, 2005.
- 4 Osher R. Association between IFIS and Flomax. *J Cat Refract Surg* 2006; **32**: 547.

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Eye (2008) **22**, 1202–1203; doi:10.1038/eye.2008.7;
published online 29 February 2008

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 α -blocker use.¹ As stated in our report² the most probable cause for IFIS in a patient with chronic chlorpromazine use for 29 years should be the α -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 α -1-adrenergic receptors, serotonin 5-HT₂ receptors, and dopamine D₁ and D₂ receptors.³ 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 α -receptor blocking activities.

References

- 1 Helzner J. Managing floppy iris syndrome. Use of Flomax has been tied to this complication. *Ophthalmol Management* 2005; **9**(4): 22–74. Available online at <http://www.ophmanagement.com/article.aspx?article=86311>.
- 2 Ünal M, Yücel İ, Tenlik A. Intraoperative floppy-iris syndrome associated with chronic use of chlorpromazine. *Eye* 2007; **21**: 1241–1242.
- 3 Hollister LE. Antipsychotic agents & Lithium. In: Katzung BG (ed). *Basic and Clinical Ophthalmology* 6th edn Appleton & Lange: Connecticut, 1995, pp 432–447.

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Eye (2008) **22**, 1203; doi:10.1038/eye.2008.8;
published online 15 February 2008

Sir,

Artificial iris rings

Srinivasan *et al*¹ 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.