Dear Editor,

The incidence of clinically significant cystoid macular edema (CME) is 0.1–2.35% following modern cataract surgery.[1] We are reporting a case of misplaced posterior chamber intraocular lens in anterior chamber in both eyes with severe CME. A 55-year-old female who had undergone cataract surgery in both eyes in the same center at an interval of 10 days 1 year back presented to us with diminishing vision in both eyes since the past 6 months. She had a best corrected visual acuity of 20/400 in the right eye and 20/200 in the left eye. Both eyes had a three-piece open “C”-looped posterior chamber intraocular lens (PCIOL) in the anterior chamber with patent peripheral iridectomy [Fig. 1]. The blue colored prolene haptics with peripheral anterior synechiae could be visualized by gonioscopy. Anterior chamber showed minimal cells in both eyes. A large posterior capsule rent with vitreous in the pupillary plane was noted in both eyes. Fundus examination showed bilateral macular edema. Fundus fluorescein angiography showed severe petalloid and honey-combed leaks in fovea and rest of the macular region [Fig. 2]. Specular microscopy showed endothelial cell density of 2234 cells/mm$^2$ in the right eye and 2178 cells/mm$^2$ in the left eye.

Because the patient refused any surgical intervention, she was managed with posterior subtenon injection of Triamcinolone 40 mg/mL in both eyes and topical ketorolac. At 3 months follow-up, she had recovered up to 20/200 in the right eye and 20/60 in the left eye.

Hara et al., studied 30 eyes over 10 years with a Sinskey-type conventional PCIOL in the anterior chamber, and showed a significant endothelial loss of 30.9%.[2] Prakash et al., reported three cases of misplaced PCIOL in the anterior chamber with secondary glaucoma managed by translocating the PCIOL using glue-assisted scleral fixation.[3] In our patient, endothelial count and intraocular pressure were normal but only on long-term follow-up could the progressive damage be assessed.

Solano et al., reported late haptics disinsertion in three-piece PCIOL with the disinserted haptics in anterior chamber causing CME, which resolved after removal of the haptics.[4] Vascular instability, chronic inflammation leading to generation of prostaglandins and vitreous traction on macula are considered to be predisposing factors of CME. In our patient, the haptics of the three-piece PCIOL were causing chronic uveitis as evidenced by the presence of cells in anterior chamber and peripheral anterior synechiae. Chronic inflammation with vitreous in pupillary plane in this patient has resulted in severe CME with vision loss.

In the event of large posterior capsule rent, anterior chamber intraocular lens (three-point or four-point fixation) or scleral fixated intraocular lens can be implanted. Donaldson et al., have shown no significant difference between scleral fixated intraocular lens and anterior chamber intraocular lens in the final outcome.[5] If the surgeon is not well versed with the technique of scleral fixated intraocular lens, then proper implantation of anterior chamber intraocular lens could have avoided such a blinding complication in this patient. The case is highlighted because of the very recent occurrence of this surgical misadventure in January 2010 in spite of multiple sessions on cataract surgical techniques in various state and national conferences.

M Ashok Kumar
Department of Ophthalmology, Mahatma Gandhi Medical College and Research Institute, Pillaivarkuppam, Pondicherry, India

Correspondence to: Dr. M. Ashok Kumar,
Department of Ophthalmology, Mahatma Gandhi Medical College and Research Institute, Pillaivarkuppam, Pondicherry – 607 402, India.
E-mail: drmashok74@rediffmail.com
References

1. Lowenstein A, Zur D. Postsurgical cystoid macular edema. Dev Ophthalmol 2010;47:148-59.

2. Hara T, Hara T. Ten-year results of anterior chamber fixation of the posterior chamber intraocular lens. Arch Ophthalmol 2004;122:1112-6.

3. Prakash G, Agarwal A, Kumar DA, Saleem A, Jacob S, Agarwal A. Translocation of malpositioned posterior chamber intraocular lens from anterior to posterior chamber along with fibrin glue-assisted transscleral fixation. Eye Contact Lens 2010;36:45-8.

4. Donaldson KE, Gorscak JJ, Budenz DL, Feuer WJ, Benz MS, Forster RK. Anterior chamber and sutured posterior chamber intraocular lenses in eyes with poor capsular support. J Cataract Refract Surg 2005;31:903-9.

5. Solano JM, Baratz KH, Mahr MA, Erie JC. Late spontaneous haptic disinsertion from a three-piece intraocular lens. Am J Ophthalmol 2007;143:521-2.

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