Persistent pupillary membrane is a remnant of fetal membrane that persists as strands across the pupil. It floats as free edges, bridges the pupil partially or completely, or is attached to the anterior lens capsule or to the posterior surface of the cornea. Persistent pupillary membrane is a remnant of fetal membrane that persists as strands across the pupil. Pupillary distortion in the postoperative period has been reported in association with iris abnormalities and as a result of cortical remnants, capsular tags, and vitreous strands in the wound. We report a case of pupillary peaking secondary to persistent pupillary membrane in a child who had lensectomy and vitrectomy with anterior chamber intraocular lens implantation. To our knowledge, this is the first case of postoperative pupillary peaking secondary to persistent pupillary membrane.

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using the vitrectomy cutter. Subsequent follow-up showed circular pupils in both eyes.

**DISCUSSION**

The persistent pupillary membrane is a mesodermal derivative, a remnant of anterior tunica vasculosa lentis that develops to nourish the developing lens.6 The hyaloid vasculature reaches its greatest development at around 10 weeks of gestation. By the end of the fourth month, the tunica vasculosa lentis and hyaloid artery regresses. The pupillary membrane begins to regress in the sixth month and disappears completely by the eighth month of gestation. A failure of degeneration of fibroblasts and collagen fibrils and phagocytic activity prevents complete regression of the pupillary membrane, which appears as a persistent pupillary membrane.6 Clinically, persistent pupillary membranes are the most commonly occurring congenital anomaly, seen in up to 95% of normal newborn babies.7 Most persistent pupillary membranes are asymptomatic and require no treatment or only medical treatment with a mydriatic agent. However, the membranes require removal if they are large enough to obscure the pupillary axis and affect visual acuity or if significant visual loss occurs in bright light (although visual impairment is minimal under normal illumination). Surgical excision and laser lysis of a membrane have been advocated,8–10 and the choice depends on the patient’s age and the characteristics of the persistent pupillary membrane.8,9 In our patient, the persistent pupillary membrane was a free-floating type.

Pupillary distortion or peaked pupil after cataract surgery may result from a variety of intraoperative circumstances. Iris chaffing, repeated iris prolapse during surgery and entrapment of the iris in the wound, and wound leak can result in a peaked pupil. The inclusion of vitreous strands, cortical fragments, and capsular fragments in the wound can produce a similar picture.4 Our case showed peaking in the postoperative period due to a free-floating end of the persistent pupillary membrane adhering to the inner

**Figure 1.** Right eye subluxated cataractous lens with persistent pupillary membrane (arrow).

**Figure 2.** Left eye, clear subluxated lens with persistent pupillary membrane (arrow).

**Figure 3.** A: Right eye peaking (arrow) of pupil, 2 days postoperatively, diffuse illumination. B: Right eye peaking (arrow) of pupil, 2 days postoperatively, direct focal illumination.
lip of the side-port incision. We recommend removing these membranes, especially if they are free floating.

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Figure 4. Right eye, postoperative day 4. Note no pupillary peaking after conservative management.