3 Gaary EA, Rawnsley E, Marin-Padilla JM, Morse CL, Crow HC. In utero detection of fetal cataracts. *J Ultrasound Med* 1993; **12**: 234–236.
4 McSpadden K, Dolinsky Z, Schroerlucke MS. *Report on the Lowe's Syndrome Comprehensive Survey*. The Lowe Syndrome Association: West Lafayette, IN, USA, 1991.
5 Chen TC, Bhatia LS, Walton DS. Complications of pediatric lensectomy in 193 eyes. *Ophthalmic Surg Lasers Imaging* 2005; **36**: 6–13.
6 Kuhli-Hattenbach C, Lüchtenberg M, Kohnen T, Hattenbach LO. Risk factors for complications after congenital cataract surgery without intraocular lens implantation in the first 18 months of life. *Am J Ophthalmol* 2008; **146**(1): 1–7.
7 Lasne D, Baujat G, Mirault T, Lunardi J, Grelac F, Egot M *et al.* Bleeding disorders in Lowe syndrome patients: evidence for a link between ORCL mutations and primary hemostasis disorders. *Br J Haematol* 2010; **150**: 685–688.
8 Spierer A, Desatnik H. Anterior chamber hemorrhage during cataract surgery in Lowe syndrome. *Metab Pediatr Syst Ophthalmol (1985)* 1998; **21**: 19–21.
9 Curtin VT, Joyce EE, Ballin N. Ocular pathology in the oculo-cerebrorenal syndrome of Lowe. *Am J Ophthalmol* 1967; **64**: 533–543.
10 Faucherre A, Desbois P, Satre V, Lunardi J, Dorseuil O, Gacon G *et al*. Lowe syndrome protein OCRL1 interacts with Rac GTPase in the trans-Golgi network. *Hum Mol Genet* 2003; **12**: 2449–2456.
11 Suchy SF, Nussbaum RL. The deficiency of PIP2 5-phosphatase in Lowe syndrome affects actin polymerization. *Am J Hum Genet* 2002; **71**: 1420–1427.
12 Raucher D, Stauffer T, Chen W, Shen K, Guo S, York JD *et al.* Phosphatidylinositol 4,5-bisphosphate functions as a second messenger that regulates cytoskeleton- plasma membrane adhesion. *Cell* 2000; **100**: 221–228.
13 Lasne D, Fiemeyer A, Chatellier G, Chammas C, Baron JF, Aiach M. A study of platelet functions with a new analyzer using high shear stress (PFA 100) in patients undergoing coronary artery bypass graft. *Thromb Haemost* 2000; **84**: 794–799.
14 Karger R, Donner-Banzhoff N, Müller HH, Kretschmer V, Hunink M. Diagnostic performance of the platelet function analyzer (PFA-100) for the detection of disorders of primary haemostasis in patients with a bleeding history-a systematic review and meta-analysis. *Platelets* 2007; **18**(4): 249–260.

M Mikhail[1], M Modabber[1], RK Koenekoop[1,2], N Braverman[3] and A Khan[1]

[1]Department of Ophthalmology, McGill University, Montreal, Quebec, Canada
[2]McGill Ocular Genetics Laboratory, Montreal, Quebec, Canada
[3]Department of Medical Genetics, McGill University, Montreal, Quebec, Canada
E-mail: ayesha.khan3@mcgill.ca

Eye (2016) **30,** 1272–1273; doi:10.1038/eye.2016.100; published online 27 May 2016

Sir,
Glaucoma and retained-triamcinolone in pediatric cataract surgery

Herein we describe a case report of a child operated for bilateral congenital cataract receiving identical treatment in both eyes, where glaucoma developed in the eye with long-term retained-triamcinolone, but not in the eye without it.

Case report
A 6-week-old infant presented to one of us (MEW) with bilateral cataract. Cataract surgery with limbal approach primary posterior capsulectomy and vitrectomy, and intraocular lens (IOL) implantation (30 D Rayner 570C, East Sussex, UK) were performed for both eyes. Two milligrams (0.05 ml) of intracameral preservative-free triamcinolone acetonide (Triesence, Alcon, Fort Worth, TX, USA) was used in both eyes. In addition to being an anti-inflammatory agent, triamcinolone acetonide helps to identify any residual vitreous strands in the anterior chamber,[1] an important advantage in younger children who routinely undergo planned vitrectomy.

Residual anterior chamber triamcinolone was noted in both eyes on the first postoperative day and at 1 week after surgery. However, at the 3-week postoperative visit, triamcinolone was not detected. Surgical removal of visual axis opacification (VAO) was required in both eyes (3 and 8 weeks postoperatively in left and right eyes, respectively). Triamcinolone was not used during the surgical removal of VAO.

Six months after surgery, the patient was noted to have an asymmetric myopic shift, greater in the left eye than in the right eye. As IOP measurement was not possible in the clinic, timolol eye drops were prescribed and examination under anesthesia (EUA) was scheduled. Axial elongation and myopic shift of refraction was documented in the left eye at the time of EUA (Table 1). Phospholine iodine 0.125%, b.i.d., was added as a topical drop for left eye. One month later (7 months post surgery), a 360-degree suture trabeculotomy *ab externo* was performed in left eye along with an IOL exchange (21 D Rayner 570C, East Sussex, UK). No residual triamcinolone was detected and no additional triamcinolone was used. An additional EUA was performed at 10 months after cataract surgery because the IOP could not be obtained in the office. Retained-triamcinolone was detected in the vitreous cavity of the left eye. None was found in the right eye. The left eye underwent a *pars plana* vitrectomy and removal of triamcinolone. Several large 'chunks' of triamcinolone were cut and aspirated without difficulty. IOP remained under control in both eyes until last follow-up at 3 years after cataract surgery.

Comment
In the case reported here, intracameral triamcinolone acetonide made its way into the vitreous cavity in the left eye and escaped detection for >10 months. In the many of our pediatric cataract and IOL surgeries, the triamcinolone acetonide remained in the anterior chamber and disappeared over a 3- to 14-day period. The lack of spread into the vitreous cavity in most cases is likely due to the capsular-fixated IOL that acts as a sufficient barrier to migration from the anterior chamber into the vitreous cavity. We do not

Table 1 Preoperative and postoperative examinations

	Right eye	*Left eye*
Intraocular pressure (mmHg)		
Preoperative	16	12
Postoperative: 8 weeks	15	22
6 months	20	28[a]
7 months	17[a]	16[b]
10 months	15	22[a]
16 months	12	18[a]
3 years	14	11
Axial length (mm)		
Preoperative	17.68	17.69
Postoperative: 6 months	21.48	22.75
16 months	22.63	23.99
Central corneal thickness (μm)		
Preoperative	681 ± 4.7	665 ± 3.5
Postoperative: 6 months	745 ± 7.6	779 ± 7.2
16 months	66 ± 3.0	667 ± 2.7
Refraction (diopters)		
Postoperative: 6 months	−4.50+1.50 × 85	−13.00+4.00 × 75
3 years	−8.25+1.25 at 102	−6.25+1.00 at 83[c]

[a]Timolol.
[b]Timolol and phospholine iodine.
[c]After IOL exchange.

routinely use intracameral triamcinolone when a child is left aphakic because the triamcinolone immediately mixes with the formed vitreous of the child and may be retained for many months. In this case, the IOL was placed in the ciliary sulcus of both eyes instead of in the capsular bag. It was felt that the family would not likely comply with the wearing of glasses, and the sulcus placement was chosen to make the lens easier to exchange later. It is likely that this ciliary sulcus placement allowed the triamcinolone to more easily migrate into the vitreous space. This happened in one eye and not in the other. A portion of it lodged in a location that escaped detection at EUA and at glaucoma surgery. Glaucoma has been reported to occur in children who have intravitreal injection of triamcinolone,[2] but this complication is thought to be very rare when intracameral placement is used.[3–6] This single-case report cannot establish a cause and effect relationship, meaning it is difficult to say if retained-triamcinolone led to glaucoma. However, it is important to note that in the case described herein, other risk factors for glaucoma (eg, age at surgery) were identical in both eyes, and glaucoma developed in the eye with retained-triamcinolone, but not in the eye without it. We now place triamcinolone intracamerally only when an IOL has been placed into the capsular bag. We have not, to date, had another incident of long-term retained-intravitreal triamcinolone following pediatric cataract surgery.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

Supported in part by an unrestricted grant to MUSC-SEI (MEW; RHT) from Research to Prevent Blindness, Inc., New York, NY, USA.

References

1 Yamakiri K, Uchino E, Kimura K, Sakamoto T. Intracameral triamcinolone helps to visualize and remove the vitreous body in anterior chamber in cataract surgery. *Am J Ophthalmol* 2004; **138**: 650–652.
2 Kiddee W, Trope GE, Sheng L, Beltran-Agullo L, Smith M, Strungaru MH *et al.* Intraocular pressure monitoring post intravitreal steroids: a systematic review. *Surv Ophthalmol* 2013; **58**: 291–310.
3 Cleary CA, Lanigan B, O'Keeffe M. Intracameral triamcinolone acetonide after pediatric cataract surgery. *J Cataract Refract Surg* 2010; **36**: 1676–1681.
4 Dixit NV, Shah SK, Vasavada V, Vasavada VA, Praveen MR, Vasavada AR *et al.* Outcomes of cataract surgery and intraocular lens implantation with and without intracameral triamcinolone in pediatric eyes. *J Cataract Refract Surg* 2010; **36**: 1494–1498.
5 Praveen MR, Shah SK, Vasavada VA, Dixit NV, Vasavada AR, Garg VS *et al.* Triamcinolone-assisted vitrectomy in pediatric cataract surgery: intraoperative effectiveness and postoperative outcome. *J AAPOS* 2010; **14**: 340–344.
6 Ventura MC, Ventura BV, Ventura CV, Ventura LO, Nose W. Congenital cataract surgery with intracameral triamcinolone: pre- and postoperative central corneal thickness and intraocular pressure. *J AAPOS* 2012; **16**: 441–444.

ME Wilson[1], RH Trivedi[1] and D Tadros[1,2]

[1]Miles Center for Pediatric Ophthalmology, Storm Eye Institute, Department of Ophthalmology, Medical University of South Carolina, Charleston, SC, USA
[2]Ophthalmology Department, Faculty of Medicine, Tanta University, Tanta, Egypt
E-mail: trivedi@musc.edu

Eye (2016) **30,** 1273–1274; doi:10.1038/eye.2016.117; published online 10 June 2016

Sir,
Surgical management of anterior capsular plaque associated with persistent pupillary membranes

Case report

A 3-week-old female infant presented with an absent red reflex in the left eye. Her past medical and ocular histories were unremarkable.

Examination revealed a persistent pupillary membrane (PPM) and what appeared to be an anterior polar cataract in the left eye (Figure 1). Dilated fundus examination and B-scan ultrasonography were unremarkable. Examination of the right eye was within normal limits.

The patient was scheduled for a left lensectomy and membranectomy. Two stab, clear corneal incisions were fashioned, and cohesive viscoelastic material was used to fill the anterior chamber. A Sinskey hook was used to lyse the PPM 360º. There was no evidence of an anterior polar cataract, and thus lensectomy was not performed. A whitish-grey plaque adherent to the external surface of the anterior capsule was noted. This was peeled off using