

Figure 1 Intraoperative view of an opaque plaque on the external surface of the anterior capsule associated with PPM.

a 25G cystotome, and Utrata forceps were then used to excise the remnant plaque (Supplementary Media). The anterior capsule was not violated and there were no intraoperative or postoperative complications. At 6 months of age, the patient had equal vision in both eyes as determined by Teller acuity cards in the right and left eyes, respectively, with part-time occlusion.

Comment

Most PPMs are fine strands that regress within the first weeks of life.¹ Some may be amblyogenic;² the decision to excise them depends on an assessment of their likely effect on visual development. They can be associated with cataracts and other ocular pathologies.³ Although anterior capsular plaques have been previously studied in the paediatric population, they are commonly on the internal aspect of the anterior capsule. They are thought to occur secondary to the differentiation of epithelial mesenchymal cells into myofibroblasts that secrete extracellular matrix.⁴ The plaque seen here was supracapsular, adherent to its external surface. Although careful removal of the plaque avoids unnecessary lensectomy, an iatrogenic secondary cataract may occur. Similar opacities have been anecdotally observed in other eves with PPM. The mechanisms of anterior capsular synthesis and development are unclear.⁵

We illustrate a case of firmly adherent plaque on the external surface of the anterior capsule in a young patient with PPM. These can often be confused with anterior polar cataracts pre-operatively. Intraoperative differentiation of the two is critical to avoid unnecessary cataract extraction. We highlight a safe and simple technique using a cystotome and Utrata forceps to remove external capsular plaques while leaving the capsule intact.

Conflict of interest

The authors declare no conflict of interest.

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TORCH testing in non-familial paediatric cataract

As TOxoplasmosis, Rubella, Cytomegalovirus and Herpes Simplex Virus are recognised as potential causative pathogens, it has become common practice to include TORCH serology in the investigation of nonfamilial paediatric cataracts. The paediatric subsection of the 2010 Royal College of Ophthalmology Cataract Surgery Guidelines endorses this practice.¹ These guidelines reference a 2004 paper by Raghu *et al*,² which reported four cases of Herpes Simplex Virus (HSV) 1-associated congenital cataract; however, none of the four patients required treatment for HSV. The guidelines do not provide further evidence to support routine TORCH testing.

Following institutional board approval from the Standards, Quality and Audit Department of the Belfast Health and Social Care Trust (BHSCT), the clinical and laboratory findings for paediatric patients (≤ 16 years old) who underwent cataract surgery between January 2006 and December 2013 were retrospectively analysed using the Northern Ireland Electronic Health Care Record system. Patients with a family history of paediatric cataracts or traumatic cataracts were excluded. TORCH titres had been performed on all 30 patients identified with non-familial paediatric cataract in this study. Five children had abnormal results; of these, one was an insufficient sample, one was a raised CMV on PCR and three further 'positive' results were considered insignificant on discussion with virology colleagues (Table 1). The characteristics of these 5 patients are given in Table 2. None of the five patients with abnormal results

1	2	7	6
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Early detected group (≤1-year-old) n = 23 (11 bilateral, 12 unilateral)				Late detected group (>1-year-old) n = 7 (4 bilateral, 3 unilateral)		
Test enzyme immune assay	No. sent ^a	Abnormal results	Outcome of abnormal test	No. sent	Abnormal results	Outcome of abnormal test
Toxoplasmosis IgM and IgG+ SFDT	18	0		7	0	
Rubella IgM & IgG	21	0		6	3	Two cases had raised IgG but IgM normal—not significant One was an insufficient sample—not repeated
CMV IgM & IgG	22	1 (†IgG but IgM normal)	Follow-up PCR ^c was normal—not significant	7	1 (†IgG)	Raised CMV on follow-up PCR—no action taken
HSV IgM & IgG	5	0	0	4	0	

 Table 1
 Results of TORCH serology in 30 patients with non-familial paediatric cataract

^aOnly 9 of the 30 had a complete TORCH screen report as the HSV screen was not routinely processed in the laboratories due to unreliability of the assays after the first few weeks of age.^bThe Sabin–Feldman dye test was routinely used for the quantification of total specific toxoplasma antibody titres.^cPCR for CMV DNA detection was carried out if specifically requested.

Table 2 Characteristics of the five patients with 'abnormal' TORCH serology

Patient Abnormal TORCH result	1 CMV †IgG Follow-up PCR normal	2 Rubella †IgG but IgM normal	3 Rubella †IgG but IgM normal	4 Rubella insufficient sample, not repeated	5 CMV †IgG Follow-up PCR positive
Gender	Female	Male	Female	Female	Male
Ethnicity	Caucasian	African	Caucasian	Caucasian	Chinese
Age at detection	3 months	2.5 years	3.25 years	5 years	3.3 years
Cataract Laterality	Bilateral	Bilateral	Unilateral (RE)	Bilateral	Bilateral
Cataract Morphology	Nuclear	Nuclear	Polar	Nuclear	Lamellar
Suspected IU infection	No	No	No	No	No
Systemic disease	No	No	No	No	No
Syndrome	No	No	No	No	No
Hearing Test	Normal	Not tested	Not tested	Not tested	Normal

had raised IgM and none required treatment for any of the TORCH organisms.

The UK vaccination programme includes MMR vaccine at 12–13 months of age. Children who have received the MMR vaccination will yield a positive IgG result on rubella testing. Two of the insignificant 'abnormal' results reported in our cohort were in children over one year-old who had raised Rubella IgG but normal IgM. Rubella testing in neonates whose mothers are rubella positive at initial antenatal booking will also yield false positives as IgG crosses the placenta.

As TORCH is generally thought of as a single serum test, it has been increasingly used inappropriately.³ The screen itself is made up of many elements and it may be more appropriate to consider targeted testing of components of the TORCH screen on a case by case basis following a detailed maternal antenatal history and taking into consideration the child's co-morbidities and vaccination status.

Conflict of interest

The authors declare no conflict of interest.

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