

Paediatric traumatic cataract in Hospital Raja Perempuan Zainab II: the clinical profiles and visual outcomes

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ABSTRACT

Introduction: Traumatic cataract is a preventable cause of acquired childhood blindness and makes up to 15–40% of all paediatric cataract cases in Malaysia. Understanding the nature of paediatric traumatic cataracts is important for prevention and management. This study aims to describe the clinical profile and visual outcomes at 6 months post operation in paediatric patients with traumatic cataract who underwent cataract extraction with or without intraocular lens (IOL) implantation.

Materials and Methods: A retrospective record review was done involving 11 patients (11 eyes) with traumatic cataracts who underwent surgery in Hospital Raja Perempuan Zainab II, Malaysia, from January 2014 until December 2023. The demographic data, clinical features, mechanisms and extent of injuries, and the visual outcomes at 6 months post operation were reported. Good outcome was defined as having a best corrected visual acuity of 6/12 or better at 6 months post operation. Patients with incomplete medical records or those who did not complete at least 6 months of postoperative follow up were excluded.

Results: Twenty-two patients were identified but only 11 were included after considering the exclusion criteria. Eleven eyes of 11 patients with the mean age 9.09 (4.13), range 3–15 years old were analysed, with eight males and three females. All patients had no underlying systemic or ocular comorbidities. Almost all patients (10, 90.9%) presented with visual acuity of 6/60 or worse and one presented with visual acuity of 6/36. The predominant injury was penetrating injury (8, 72.72). Most of the ocular trauma occurred at home. Seven patients had lens aspiration and IOL implantation at the same setting, three patients underwent plain lens aspiration with subsequent secondary IOL implantation, and one patient was left aphakic. Eight patients (72.7%) had good final visual outcome (6/12 or better). Three patients had poor visual outcome; one patient was left aphakic due to significant cornea scarring, one patient had amblyopia and one had significant cornea scarring with post-traumatic endophthalmitis.

Conclusion: 72.7% of the patients achieved good visual outcome of 6/12 or better, comparable to studies in other countries (50–80%). A similar study done at another local centre but only had 34.48% of patients achieving good outcome, which was mainly due to significant corneal opacity and amblyopia, similar to this current study. Early detection and intervention are important to prevent amblyopia. As the traumatic event mostly occurred at home, precautions should be made to provide a safe environment for children, including avoiding furniture with sharp edges and safely storing sharp items.

Keywords: Paediatric