

PAEDIATRIC OCULAR TRAUMA IN KUCHING, SARAWAK, MALAYSIA

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ABSTRACT

Purpose: To evaluate the demography, aetiology, type and outcome of paediatric ocular trauma in tertiary centre in Malaysia.

Method: We retrospectively studied 118 eyes from 117 patients over a period of 36 months (January 2006 to December 2008). All ocular injuries in patients aged 12 and below seen in the Ophthalmology Department for the first time were included in this study.

Results: Mean age of patients was 6.1±3.0 years. 68 cases (58.2%) occurred in pre-school children, whereas 49 (41.9%) in school-aged children. Boys accounted for 65.8% of cases. There was no predilection for either right or the left eye. 47% of cases (56 patients) occurred in Malay. Most of the injuries took place at home when the children were alone ($p<0.05$). Sharp objects were the commonest cause (45 cases, 38.1%). The majority of cases (103, 87.3%) were considered preventable. The frequency of open and closed globe injury was similar. Hyphema was more common in closed globe injury compared to open globe injury ($p<0.05$). Other associated injuries such as cataract, vitreous hemorrhage and retinal hemorrhage are similar between the two groups. Visual outcome is generally poor with only 34 eyes (28.8%) had no visual impairment.

Conclusion: Ocular trauma in children is an important cause of visual loss. Most cases occurred at home and were preventable. Prevention through education is the best approach.

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INTRODUCTION

Sight is considered to be the most important of the five human senses; vision is a critical aspect of many occupations. Ocular trauma is therefore an important public health issue as it is the major cause of acquired unocular blindness among children.¹⁻³ The Prevention of Blindness America stated that about 90% of all eye injuries and 50% cases of blindness are preventable.⁴ Harrison and Telander pointed that children are pre-disposed to eye injury because of their developing coordination, daring manner of play, as well as lack of anatomical protection from the eyebrow, cheekbone and the nose.⁵ Additional factors include limited common sense, lack of emotional control, relative ignorance, imitation of behaviour and natural curiosity.^{3,6} Visual lost in the paediatric age group can be a direct consequence of the trauma or secondary to amblyopia. This in turn impairs their psychosocial development.

The characteristics of children at risk, the agents of injury, and the environmental determinants of ocular trauma vary in different

countries. One common factor was that most injuries involved boys.¹⁻³ Local data is important to create awareness of the magnitude of the problem and for the planning of preventive strategies, especially in a multiracial country like Malaysia. So far, there is not much data on paediatric ocular trauma in Malaysia. Mallika presented the causes and visual outcome of childhood eye injuries seen in Malaysian primary eye care setting.⁷ The aim of this study was to determine the demography, aetiology, type and outcome of paediatric ocular trauma in tertiary centre in Malaysia. These data are valuable in the provision of specific recommendations for primary prevention measures.

METHOD

This was a retrospective study where medical records over a period of 36 months (January 2006 to December 2008), at the Ophthalmology Department of Sarawak General Hospital, Kuching, Malaysia were examined. All ocular injuries in patients aged 12 and below seen in the Ophthalmology Department for