

The Epidemiology, Etiology and Short Term Visual Outcome of Paediatric Ocular Emergencies in Tertiary Care Centre

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Abstract

Background: Vision development is a complex system that requires the development of neuro ocular pathways and depends on proper visual stimulation of both eyes. Paediatric age group is more vulnerable to ocular injuries and any damage to eyesight will result in affecting the child in their growth and development. **Aims:** To Study the patterns of ocular emergencies in Indian paediatric population and its short term visual outcome. **Setting and Design:** Observational study, analytical study carried out for a period of two years. Data collection from August 2017 to September 2019 including demographic profile, place of injury, type of health care facility first sought, time delay in first treatment, pattern of ocular injury on Birmingham Eye Trauma Terminology System (classification), treatment given by us, and best corrected visual acuity (BCVA). **Results:** Mean age of patients is 7.79 ± 2.53 years with 105 (60%) male patients and 70 (40%) female patients. In traumatic injuries children between the age of 7 and 10 years constituted the largest group accounting for 62.7 % (94/150) of total patients. 50.2% were from urban population. 50.7% of total cases contacted first sought treatment at tertiary health facility. Mean definitive treatment time interval (23.30 ± 8.04 h) was significantly higher when patients sought primary care at Primary health facility or private health facility first rather than coming directly to the tertiary care centre (15.70 ± 5.20 h). 58% (n=87) of total injuries were due to blunt objects. At the end of 2 months 92.6% of closed globe injury cases had VA of 6/18 or better. **Conclusion:** Majority of paediatric ocular emergencies are traumatic in nature, more in 7-10 years age group with equal rural and urban distribution. Most of the injuries were sustained in domestic environment.

Key words: Blunt trauma, Corneal laceration, Cracker injury, Hyphema, Penetrating injury, Paediatric trauma; Ocular trauma