

Infant ocular trauma in south of Brazil

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INTRODUCTION

About 80% of all external stimulus are captured by the eyes¹. The presence of a disease that compromises the quality of visual formation, must be identified early^{2,3}, as the loss of this function can trigger functional, economic, social and psychological restrictions⁴. Eye injuries are the most common causes of acquired monocular blindness in children^{5,6}, as they are more susceptible to eye damage due to immaturity of motor skills, lack of common sense, curiosity and a tendency to imitate their elders without thinking about the risks and consequences⁷. The prognosis of eye injuries in children has a tendency for eye atrophy in piercing wounds and amblyopia resulting from trauma, mainly in children under five years of age⁸.

OBJECTIVES

Studying the epidemiological profile of ophthalmologic emergencies attended in the Emergency Room (E.R.) of a children's hospital can promote important data for the prevention of trauma and eye diseases, including a positive impact on the life quality of the patient, family and the entire local population.

METHODOLOGY

A retrospective and cross-sectional study was carried out, in which was analysed the electronic medical records of 461 children between 0 and 14 years old, from 01/01/2013 to 12/31/2017, seen at the Emergency Room of the pediatric hospital - Dr Jeser Amarante Faria (HJAF) in Joinville, in the south of Brazil. All patients treated by E.R. who required an ophthalmological evaluation during this period were included in the study and those with incomplete medical records were excluded. Patients were divided into 5 groups, according to age: neonates (0 to 28 days), infants (29 days to 2 years), preschoolers (from 2 to 6 years), schoolchildren (7 to 10 years) and adolescents (11 to 14 years). The age classification followed the criteria of the Brazilian Society of Pediatrics (SBP). The database was analyzed on an Office Excel® table.

RESULTS

During the study period, 261,632 patients attended the E.R. 461 required an ophthalmologist's assessment and only 26 patients returned to the E.R. for the same reason. There was a predominance of male patients (61%).

Most of the children were from Joinville, but there were children from 51 other cities.

About the age, the highest prevalence of ophthalmologic urgency was between 2 and 3 years old.

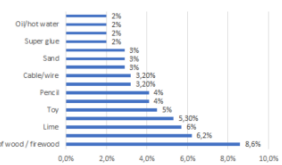
Only 18 patients received an International Classification of Diseases (ICD) by the pediatricians of the E.R., which corresponds to 3.85%. Of those, 44% agreed with the ophthalmologist. Regarding the outcome of the cases, 325 were discharged (67%), 117 were referred for outpatient return (24%), 35 required some intervention in a surgical center (7%), 4 cases of hospitalizations without surgical intervention (0.8%), 2 cases had to be transferred to a referral center and 4 cases avoided at the service. The most frequent ophthalmic diagnoses were described in Graph 1 and the objects most associated with the trauma mechanism are described in Graph 2.

The most frequent ophthalmic diagnoses



Graph 1: Most frequent diagnoses of emergency care at the HJAF Emergency Room.

Mechanism of trauma



Graph 4: Distribution of causal agents for cases of ophthalmic trauma in the Emergency Room of HJAF

CONCLUSION

This article recognizes the scarcity of research and information on ophthalmic emergencies in children's hospitals across Brazil. The lower ability to avoid dangerous situations and children's natural curiosity increase the rate of eye damage in this age group. In addition, most eye injuries can be prevented in childhood. This suggests the need for health education for parents, caregivers, teachers and children as a strategy to reduce the frequency of pediatric eye trauma. In addition, the collaborative intervention between pediatricians and ophthalmologists in the management of trauma is essential for a better prognosis of ocular involvement.

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