Epidemiology of Pediatric Head Trauma in Guilan

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Abstract

Background

Head injury (HI) is preventable and knowledge of the epidemiology of children's HI is essential for developing preventive strategies.

Objectives

The aim of this study was to survey pediatric HI patients admitted to emergency wards at Poursina Hospital in Rasht, Iran, from 2009 to 2010, and to identify the cause of HI in these children.

Patients and Methods

In this retrospective study, all HI patients under the age of 18 who were admitted to emergency wards between March 2009 and March 2010 were enrolled in the study. Demographic, etiologic, and injury data were collected and a descriptive analysis was performed.

Results

A total of 668 patients were included in this study. The mean age was 10.4 ± 5.3 years. The most frequent cause of HI was traffic accidents. The mean Glasgow Coma Scale (GCS) score was 14.5 ± 1.6. The ratio of boys to girls was approximately 3 to 1. The ratio of boys to girls increased with increasing age (P < 0.01). Moreover, an association was found between age at injury and etiology of HI as well as a significant association between age at injury and the place of event (P < 0.01).

Conclusions

The incidence of childhood HI due to traffic accidents is high (81% of pediatric trauma cases). Thus, motorcyclist education and improvement in traffic engineering for pedestrians and bicyclists should be included in prevention programs.

Keywords: Epidemiology, Head Injuries, Pediatric Trauma, Traffic Accidents