A seven-year study on head injury in infants: the changing pattern

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Objective: Head injury (HI) is the leading cause of mortality and lifelong disability for infants. Infants have different anatomical and pathophysiological brain structures from other age groups. This study surveys infant HI patients admitted to Shahid Beheshti Hospital in Kashan, Iran from 2004–2010 to identify the causes of HIs in infants.

Methods: In this retrospective study, all HI patients under the age of two who were hospitalized for more than 24 hours from January 2004–January 2010 were enrolled in the study. Demographic, etiologic, and injury data were collected and a descriptive analysis was performed.

Results: Infants comprised 20.8% of all children (under 15 years old) with HIs; 65.1% of the injuries occurred in the home. Falls were the most common cause of injury (63.4%). Hospital mortality was 6.6 per 100,000 infants. A decreasing trend was seen at home events, but HIs caused by traffic accidents were increased during the study period. The number of HI infants from car accidents tripled from 2004–2010.

Conclusion: Our study showed an increase of HIs caused by road traffic accidents, especially by car accidents although home accidents and falling are the main causes of infant HIs. Thus, legislation for the implementation of protective equipment such as child safety seats and programs need to be implemented.

Keywords: Infant; Brain injuries; Epidemiology