The study of head injury due to motor vehicle accident in Taiwan area.

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Abstract

BACKGROUND: Injury ranked third among the top 10 leading causes of death in Taiwan from 1964 to 1996 and is still among the top 10 presently. Among transportation accidents, motor vehicle-related injury had the highest incidence rate, often resulting in traumatic head injury. METHODS: This survey was conducted from July 1, 1994, to June 30, 2002, and was collected from 55 major hospitals in Taiwan. A total of 90250 patients with TBI were enrolled, and 27585 cases were identified to have TIH. In this study, SPSS 10.0 (SPSS, Chicago, III) was used to process the data. Regarding the rating model itself, reliability and correlation tests were conducted to calculate the coefficiency, and factor analysis was carried out to verify its validity. RESULTS: The incidence rate of male-to-female ratio was 2.65. Traffic injuries (67.6%) were the leading causes of TIH. Among the traffic injuries, motorcycle-related traumatic injuries had the highest incidence rate (69.6%). In the logistic regression analysis, older patients had the highest risk of developing TIH. Patients without a motorcycle helmet had a higher risk (odds ratio, 1.40) of developing TIH than those with a helmet. As regards the types of injuries, pedestrian injury (odds ratio, 1.61) had the highest risk of developing TIH. CONCLUSIONS: Although traffic injuries, especially those caused by motorcycles, are the major cause of intracranial hemorrhage, we have to pay due attention to falling, pedestrian, and bicycle injuries, as these are all major causes of intracranial hemorrhage.