

Neurotrauma research in Taiwan

林家瑋

Lin J W;Tsai JT;Lin CM;Hung KS;Hung CC;Chiu WT

摘要

Abstract

Because of the rapid industrial and economic growth, Taiwan and other developing countries have faced an enormous increase in the number of motorcycles, which has subsequently caused a rapid increase of the motorcycle-related traumatic brain injuries (TBI). In order to tackle this serious problem, stepwise approaches for TBI were implemented in Taiwan from 1991 to 2007. Step 1 was to do a nationwide TBI registry in order to identify the risk factors and determinants. We found that the major cause of TBI in Taiwan was motorcycle-related injury, and very few motorcyclists wore a helmet. Step 2 was to launch the implementation of the helmet use law on June 1, 1997. A rapid decline of TBI hospitalizations and deaths was demonstrated soon thereafter. Step 3 was to enroll into international collaborations with the Global Spine and Head Injury Prevention Project (Global SHIP Project) groups for TBI. The comparative results thus obtained could be used to develop prevention strategies for developing countries. Step 4 was to implement clinical researches for TBI, which included a Propofol study, hyperbaric oxygen therapy (HBOT), brain parenchymal oxygen (PbtO₂) monitoring, etc. Step 5 was to develop guidelines for the management of severe TBI in Taiwan. Through a 2-year period of review, discussion, and integration, a 9-chapter guideline was published in June 2007. In summary, our experience and process for management of TBI in Taiwan can be used as a reference for other developing countries.