

Emergency Air Medical Transport of Patients with Severe Head Injuries from a remote island to Taiwan

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Abstract

BACKGROUND: Patients suffering head injury in remote islands of Taiwan, which have a shortage of manpower and facilities, depend on EAMS for prompt and definitive treatment. Emergency air medical services are becoming an increasingly important issue in improving the quality of primary care and avoiding medicolegal problems. The purpose of this study was to investigate the characteristics of patients with head injury and use of EAMS. **METHODS:** We reviewed all patients, especially head injury transported by air ambulance from a remote island, Kinmen (400 km from Taiwan Main Island), from January 2001 to December 2003. Data were collected with regard to demographics, disease classification, mechanism of injury, severity of head injury, ventilator use, and mortality rate. **RESULTS:** A total of 215 patients were transferred, of whom 57 (27%) had head injury. The mean age of patients was 48.6 +/- 23.8 years. Males accounted for 72% of the cases (male/female ratio, 2.6:1). Motor-vehicle accidents were the most common mechanism of injury (68%). There were 21 (37%), 20 (35%), and 16 (28%) patients in the minor, moderate, and severe head-injury groups, respectively. Nineteen patients (33%) received mechanical ventilation. The overall mortality rate was 14 % (8/57). In the severe head-injury group, the mortality rate was 44% (7/16). **CONCLUSIONS:** The higher incidence of head injury (26.5%) in EAMS than in ground transportation (19.8%) suggests that preflight assessment and in-flight management of patients conducted by an experienced escort team following guidelines for head injury in EAMS are a very important issue.