

reports for submission to MOHCC is discussed.

Keywords: casualties; disaster; hospital; information; information technology; management

Prehosp Disast Med 2001;16(3):S116-117.

Disaster Management of SQ006 Crash in Chang Gung Linkou Medical Center

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Background: Typhoon Xangsane whirled closer to Taiwan on 31 October 2000, prompting officials to set up disaster relief centers, cancel flights, call-off classes, and raise land and sea warnings. At 23:18 hours, a Boeing 747-400 of Singapore Airline crashed and erupted into flames at Chiang Kai-shek (CKS) International Airport. Flight SQ-006, carrying 159 passengers and 20 crew members, was bound for Los Angeles. Seventy-nine were dead at the scene, and 100 people were evacuated; 16 of them were unhurt, and 84 were injured.

Methods: A retrospective study was conducted in the Linkou Medical Center of Chang Gung Memorial Hospital, which is the primary hospital responsible for CKS International Airport. The records of disaster and charts of the admitted casualties from SQ-006 crash were reviewed.

Results: The disaster plan was declared at 23:50 hours, and ended at 02:00 hours of 01 November 2001. In total, 36 patients were treated at Linkou Medical Center of Chang Gung Memorial Hospital. Thirty-four were transferred from the scene immediately, and the other two were transferred secondarily from other hospitals. Twenty-six were male, and 10 were female; thirty-four were adult, and two were boys. The age ranged from 6 to 66 years.

After prompt evaluation, stabilization and management, 14 patients mainly associated with truncal contusion or minor lacerations of the extremities, were discharged from ED. Twenty-two patients were admitted, and one patient with burns on 100% of their body died shortly after admission. An Injury Severity Score >15 was found in nine patients. Nineteen of the admitted patients suffered variable degrees of flame burn or inhalation injury. Three patients (14%) suffered from blunt abdominal trauma and required emergent celiotomy. Four patients (18%) suffered orthopedic injuries, two with extremity open fractures, and another with lumbar spine bursting fracture, and the other with odontoid fracture and C5-C6 subluxation. Eight patients required emergent or urgent surgical interventions.

The last patient was discharged on 15 February 2001; 19 patients were discharged smoothly and 3 died from sepsis and multiple organ failure. Seven patients were transferred to their home country during hospitalization, four were sent to the States; 2 were sent to Singapore; one was sent to New Zealand. The overall mortality rate was 8% (3/36), and mortality rate of admission patients was 14% (3/22).

Conclusions: The prompt disaster response and coordinated

management of this catastrophic crash, which occurred at midnight in terrible weather, was attributed mainly to a comprehensive disaster plan, repeated drills, and the location of a nearby hospital dormitory. This crash upon take-off resulted in more than half of patients with severe burns, and some of them, combined with other major injuries, mandated emergency operations. To ensure timely and optimal care of the multiple injuries after an airplane crash, the primary hospital for all international airports not only need a disaster plan and repeated disaster drills, but also should be a level-one trauma center that includes a burn unit.

Keywords: airplane crash; burns; casualties; disaster management; trauma; Typhoon Xangsane

Prehosp Disast Med 2001;16(3):S117.

2.10. Resuscitation

Update in Resuscitation

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There has been a number of significant changes in the teaching of basic cardiac life support guidelines including new recommendations for bystander cardiopulmonary resuscitation (CPR), teaching, instruction for the use of automated external defibrillators (AEDs) to the lay public, and use of smaller tidal volumes with assisted breathing devices.

Likewise advanced cardiac life support guidelines have changed in accordance to the best available clinical evidence. These include downgrading of lidocaine and high dose epinephrine with greater emphasis on the use of drugs like amiodarone, vasopressin, and procainamide.

New airway devices also are advocated under these new resuscitation guidelines. Conventional teaching on Sellick's manoeuvre also has come into question recently, as it may increase occlusion of the airway.

There also is an increasing role for the use of new modalities in resuscitation especially low energy, biphasic defibrillation for malignant arrhythmia with better success rates while minimising myocardial damage.

Keywords: amiodarone; automated external defibrillators; cardiopulmonary resuscitation; procainamide; Sellick's manoeuvre; vasopressin

Prehosp Disast Med 2001;16(3):S117.

Update in Paediatrics Resuscitation

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The changes in the new international guidelines for paediatric resuscitation mainly consist of modification in the