(P1-13) Initial Experience with Mobile Computed Tomography in the Neurosurgery Intensive Care Unit in a Level-1 Trauma Center in India

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Background: Neurosurgical patients require frequent Computed Tomographies (CTs) of the head, usually at short notice. A mobile CT may prove to be invaluable for these patients.
Objectives: To review the usefulness of mobile CT in intensive care unit (ICU).
Methods: This review was carried out over a 14 month period (18 July 2009 till 31 August 2010). Administrative and clinical data were reviewed and analyzed. For the first 6 months, only the number of CT's done was available. However, data were collected prospectively starting 01 Jan 2010 to include variables such as Glasgow Coma Scale (GSC) ventilator status and pressor support at the time of CT scan. The average time to do a CT was 150 minutes (range 60–240 minutes). The mean number of people required for shifting the patient was 4(range 3–6). For, mobile CT the average time to do a CT was 27.4 minutes (range 7.8–47 minutes) and mean for manpower was 3 (range 3–4).
Observations: The mobile CT was installed and became functional in the neurosurgery ICU on 18 July 2009. A total of 1,752 head CTs were performed during the study period, with an average of 4.8 CTs daily. Detailed prospective data were available (since 01 January 2010) on 1,023 patients. Of these patients, 75.9% (n = 776) were on ventilator, 72.3% (n = 740) were on sedation, and 5.6% (n = 57) were on pressor support at the time of CT. The mean GCS at the time of CT was 8.1 (range 3–15).
Conclusions: Mobile CT was found to be easy to use, with fast scanning time and excellent image quality. It proves to be beneficial for nurses as it requires less time, energy and manpower. The mobile CT is strongly recommended for any high volume neurosurgery department in the country.
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(P1-14) Incident Command and Rescue during a Building Collapse

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On 11 December 2006, at 8:20h, five flats of a building containing 10 apartments collapsed due to a heater explosion. Four injured patients were transferred to a military hospital with the help of bystanders. Approximately 200 people gathered at the scene. People who were trapped in the building were rescued. The building was surrounded by safety tape. The first injured patient was discovered 4 hours after the collapse. The patinet was transferred by the National Medical Rescue Team. Rescue activities were terminated after 36 hours. A total of eight dead, including five children, and five injured people were recovered from the building. Six of the eight injured patients had superficial wounds. Two patients were monitored: one with head trauma and another with liver contusion and costa fracture.
Discussion: The explosion occurred during working hours, which contributed to the low number of injuries and deaths. The top floor of the building had the highest survival rate. Bystanders entered the scene through the safety tape, and complicated the rescue efforts.
Conclusions: Rescue efforts during disasters require a high level of education. Otherwise, it becomes impossible to control the crowd and prevent chaos. Also, considering the direction of the building collapse during the rescue activities might enable reaching more people in a shorter time period. Coordination by the departments taking part in the rescue efforts is just one of the key issues affecting a successful response.
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(P1-15) Russian Mobile Hospital Response to the Earthquake in Sumatra, Indonesia, October 2009

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Introduction: A destructive 7.9 magnitude earthquake struck the Sumatra Island of Indonesia on 30 September 2009. A Russian mobile hospital was implemented on 04 October in the village of Lupu-Alu, 20 km from the city of Padang.
Method: The mobile hospital consisted of 20 pneumo modules equipped with technical systems. Personnel included 9 engineers and 25 medical specialists comprised of surgeons, therapists, traumatologists, children's surgeons, a pediatrician, and anesthesiologists. An air-mobile hospital was equipped with modern medical equipment (X-ray, ultrasonic diagnostics, etc.). Work at the hospital was complicated by almost daily tropical rains. The language barrier was addressed by using local translators who spoke Russian or English languages.
Results: Medical aid was rendered to 479 patients. The intensive care department experienced the heaviest patient load (n = 11). Trauma (n = 54, 2%) and proinflammatory complications prevailed among surgical patients (n = 131). Treatment of bone fractures represented significant difficulties due to the late delivery of care. Of the 479 patients, 207 (43.2%) were children; among them, 49 (7%) had diseases of the upper airways, and 30 (4%) experienced trauma. Psychologists consulted with 52 children with post-traumatic stress syndrome. Telemedical consultations were conducted by the following specialists: (1) orthopedist (n = 2); (2) dermatologist (n = 2); (3) neurosurgeon (n = 1); and (4) plastic surgeon (n = 1).
Conclusions: Following the earthquake, medical personnel at the Russian mobile hospital in Indonesia experienced: (1) a large number of outpatients with various diseases who lacked medical care as a result of the non-functioning network of local public health services; (2) the admission of the patients with complications of trauma; (3) a significant number of children with inflammatory diseases of the upper airways; and (4) an opportunity of use telemedical consultations.
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