of an EMR System in the emergency department of a Level-1 Trauma Center.

Methods: A qualitative survey was conducted among consenting doctors and nurses in the emergency department of the All India Institute of Medical Sciences February to October 2010. Data were collected from a sample of 22—eight doctors and 14 nurses. The collection tool was a structured, closed-ended questionnaire of 12 questions based on usability, applicability, and security, of EMR. A Likert scale (LS) was used (1 = worst, 4 = best). Surveys were done on Day 20, Day 45, and after nine months of implementation of. Responses of emergency care providers were compiled and analyzed using SPSS version 16.

Results: Three surveys consisted of 22 participants in each survey. The survey domain of usability improved on Survey 3 (LS = 2.57), Survey 2 (LS = 2.46), Survey 1 (LS = 2.24). Application of EMR improved from Survey 1 to Survey 3. The data regarding perception of security concerns such as manipulation of data, transparency, and accountability were comparable among Survey 1, Survey 2, and Survey 3. Initial satisfaction was strongly associated with perception of usefulness of data mining for research purposes.

Conclusions: Satisfaction with an EMR system at its implementation generally persisted through the first year of use. Implementation plans must include positive reinforcement regarding EMR among emergency care providers.

(P2-66) Experience of 14 Cases Exposed to Hydrazine

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Hydrazine, a highly toxic agent is mainly used as a high-energy rocket propellant or reactant in military fuel cells, in nickel plating, in the polymerization of urethane, for removal of halogens from wastewater, as an oxygen scavenger in boiler feedwater to inhibit corrosion, and in photographic development. Short-term exposure to high levels of Hydrazine may cause irritation of eyes, nose, and throat, headache, nausea, dizziness, pulmonary edema, seizures, and coma. Acute exposure can also damage liver, kidneys, and central nervous system. Dermatitis may develop by skin contact. In this article we aimed to present our experience belongs to 14 cases exposed to Hydrazine. Cases were evaluated retrospectively based on demographic data, exposure type, approximate exposure time, clinical features, lab analyzes and results of follow-up. Cases were all male personnel. Mean age and standard deviation were 30,28 and 6,73 respectively. All cases were exposed to Hydrazine in an open place during the monitorization of aircraft for a couple of seconds. Personnel were presented to feel an odor similar to garlic in their nasopharynx. Retrosternal burning was the preponderant symptom in 6 of the cases. The vital signs and physical examination provided no valuable data. Evaluation of Whole Blood Count, Arterial Blood Gas, Biochemical Parameters, Urine Tests, ECG and Chest Radiograph took place in diagnosis period. Respiration function tests were performed on the 6 of the cases who had respiratory complaints. All tests revealed unremarkable data. All cases were

subjected to reevaluation in the end of next 48 hours. No complications were encountered on the next examination. Our cases presented no mortality and complication due to having information about Hydrazine and short-term exposure and exposure in open place. Of personnel working in such places including Hydrazine, having information about Hydrazine, is the leading factor in preventing mortality and complications of Hydrazine.

(P2-67) Torsade De Pointes and Ventricular Fibrillation Accompanying Intracerebral Hemorrhage

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A 43-year-old patient with well healthy in the past was admitted after a accidental falling down injury. Upon arrival at the Emergent Department, he was unresponsive. (Glasgow coma scale = E1V1M1). The continuous Electrocardiological monitor demonstrated ventricular fibrillation without pulse, and the defibrillation (360 J) with intravenous Epinephrine (1 mg) push was given. The electrocardiogram (ECG) returned to sinus tachycardia. The endotracheal tube was intubated to keep airway patent and ventilation under the unstable vital sign. Ten minutes later, the polymorphic ventricular tachycardia (torsade de pointes) were recorded by continuous ECG. After defibrillation (360 J) twice with intravenous Epinephrine (1 mg) and Amiodarone (150 mg), the rhythm returned to normal sinus rhythm, and the vital sign recovered gradually. The laboratory evaluation showed no abnormality. The cranial computed tomography was done thereafter which showed occipital bone fracture with subarachnoid hemorrhage, subdural hemorrhage and epidural hemorrhage (Figure 2, arrows indicated hemorrhage). Clinical study has shown increased sympathetic activity in patients with acute intracranial hemorrhage. The increased level of catecholamines would lead to QT prolongation or hypokalemia, which are the predisposing factors of the development of torsade de pointes. Although, the definitive confirmation of a cause and effect relationship about intracranial hemorrhage and torsade de pointes is still controversial, the life-threatening arrhythmia, including atrioventricular blocks, ventricular tachycardia, and fibrillation, which accompany acute cerebral accidents in patients without cardiac disease is observed in many case reports. In our experience and clinical observation, patients should be constantly monitored after acute cerebral events. Besides, the treating team should be familiar with and well-trained in the diagnosis and treatment of cardiac arrhythmias.

(P2-68) Mental State of Healthcare Workers in a Designated H1N1 Screening Center

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Introduction: In Singapore, the H1N1 outbreak lasted 108 days. The study emergency department (ED) was designated as Singapore's H1N1 screening centre for the borders and the

country's primary care centers. Our aim was to determine the psychological morbidity among ED physicians, nurses, administrative and ancillary staff during the H1N1 outbreak.

Methods: We conducted a survey on all ED healthcare worker (n = 305) using the 12-item General Health Questionnaire (GHQ-12). The bimodal scoring of GHQ-12 was dichotomised into non-cases (score 0 – 2) and potential cases (score ≥ 3). Participation was strictly voluntary.

Results: The overall response rate was 273 (89.5%). Most respondents were females (73.3%); the mean age was 33 (SD 10.6) years. The mean GHQ score was found to be 1.9 (SD 2.7) with no gender-related differences. A comparison of the dichotomised GHQ-12 scores, found psychological morbidity to be more common in administrative staff (40%) and physicians (38.1%) than ancillary (24.2%) and nurses (19%) (p = 0.011). The average prevalence of psychological morbidity among ED staff was 25.3%. When we considered the 12 items of the GHQ separately and analyzed them by occupational group, we found physicians scoring the worst on item 6 - "Could not overcome difficulties" - than nurses, administrative and ancillary staff (p < 0.001). Physicians and administrative staff alike felt constantly under strain and were unable to concentrate compared to nurses and ancillary staff (p = 0.001).

Conclusion: Healthcare workers in an emergency setting unlike those in the rest of the hospital, face a wide range of risks on the job and this has a substantial effect on their mental well-being and job satisfaction.

(P2-69) Diagnosis and Management of Bile Leaks After Blunt Liver Injury by Dicct

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Background: Although bile leaks are emerging as frequent complications of non-operative management of liver injury, the best method to use to diagnose intrahepatic biliary injury (IHBI) has not been established.

Methods: Fifteen patients with a blunt liver injury admitted to the hospital during a two-year period, were diagnosed by computed tomography as having a grade 3–4 injury, and underwent DIC-MDCT intended to diagnose IHBI in its early stages. These 15 patients included 11 with a grade 4 (Group A: five patients who underwent TAE; Group B: six patients who did not undergo TAE) and four with a grade 3.

Results: In Group A, all of the patients were found to have some signs of IHBI in DIC-CT. Of these patients, two were found to have extrahepatic leakage and underwent local drainage; one also underwent ENBD. Three patients were not found to have extrahepatic leakage even though they had signs of IHBI; these three underwent conservative therapy with no other care, and had a satisfactory course. In Group B, only one patient was found to have IHBI. However, all of the patients, including those not found to have signs of IHBI in DIC-CT, recovered. Patients with grade 3 did not have signs of IHBI. Compared to Group B, Group A had a high Injury Severity Scale Score of 38.5 ± 11.2, and a higher incidence of IHBI.

Conclusions: DIC-MDCT may, in cases of severe liver injury that might require TAE, help to diagnose IHBI in its early stages, and help to determine if additional treatment is needed based on the site and extent of the injury and whether extrahepatic bile leakage is present.

(P2-70) A Systematic Search and Narrative Review of Existing Literature on the Medium and Long-Term Impact of Injuries

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Background: A systematic search and narrative review of existing literature on the medium- and long-term impacts of injuries was conducted to provide context for a primary research study.

Methods: Searches were undertaken in MEDLINE, CINHAL and Science Citation Index using a combination of free text and Medical Subject Heading (MeSH) terms. Studies were included if they assessed outcomes following injury at least six months post-injury and reported morbidity-related outcomes. A standardized data extraction form was developed, and studies were assessed for quality using standard quality assessment criteria. The main characteristics of included studies were presented in structured tables and synthesized using a narrative summary.

Results: The search strategy identified 4,969 abstracts and/or titles, of which 125 appeared relevant. Following a detailed reading of the material, 32 studies met the inclusion criteria of this review. Summarizing the results of the studies was difficult, as they were of moderate quality and used many different methods. The main findings were that at 12 months post-injury a proportion of injured patients continue to suffer from physical, psychological, and social problems and this proportion doesn't decline over the next few years. In the medium term (12 months–5 years) about 10–25% of casualties continue to report a variety of health problems associated with their injuries.

Conclusions: It is difficult to synthesize injury outcome studies because of the varying methodological approaches, study populations, follow-up periods, and outcome measures used. The evidence that exists suggests that many casualties demonstrate good early recovery but a significant proportion still show significant social, physical, and psychological sequelae one to five years post-injury.

(P2-71) Topometric Agent-Based System for Disaster and Emergency Medicine

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Introduction: A variety of models, methods, and computer-aided systems have been used to predict and analyze disasters