

including two traumatic amputations of their left arm, one liver laceration with internal bleeding, one traumatic amputation of the left thumb, and one with open fracture of the first metacarpal bone and the second proximal phalanx. The injured were rushed to five nearby hospitals for emergency treatment.

Using the Potential Injury Creating Event (PICE) system, the incident is classified to be dynamic, paralytic, local, PICE stage III at the scene initially; then dynamic, disruptive, regional PICE stage I later. There have been no similar incidents reported for this sport in the past.

We conclude that this type of mass activity should be the subject of disaster preparedness and planning.

Keywords: injuries; mass gatherings; multicasualty incident; planning; preparedness; sports events; tug-of-war

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Legal, Diplomatic, and Geopolitical Concepts that Physicians on International Humanitarian Missions Should Know

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Introduction: Over the past three decades or so, humanitarian missions have acquired a certain professionalism, benevolent service, and idealized internationalist enthusiasm that gradually is being replaced by a more structured humanitarian medicine that is better taught and coordinated with the view to preparing physicians for the diverse problems of humanitarian action.

Objectives: This study is part of a medical thesis (PS) that attempts to evaluate the deficiencies observed by health workers in their humanitarian missions, and to define the components of a specific training program for such personnel.

Study: Based on interviews with specialists of humanitarian missions (principally members of inter- and non-governmental organizations), the authors formulate the contents of a university pedagogic program that integrates three specific disciplines: 1) public international law; 2) international humanitarian law; and 3) diplomatic-geopolitical action.

The paper proposes a program with examples of its utility in the varying aspects of different missions. Such teaching also can be useful to the medical directors, mission administrators and IGO or NGO cadres in organizing their work and managing public and personal relations with their local professional and political counterparts.

Keywords: diplomacy; geopolitics; humanitarian medicine; Humanitarian mission; international law, training

P-22

Disaster Preparedness: The Role of the Nurse

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Emergency nurses play an important role in the "all hazards" approach to hospital disaster planning in the USA. Ideally, emergency nurses act administratively with physicians to coordinate, develop, and support protocols for patient and Emergency Department management.

It is necessary that every hospital develop the capacity to safely assess and treat patients exposed to hazardous materials either from industry, transportation, or from a terrorist attack. Emergency nurses are involved actively in decision-making with all aspects of disaster planning and implementation. In addition, they continue to refine and improve disaster planning based on performance drills and actual disasters. They amend policies and procedures as needed to ensure safety and standards of care. Nurses also act as liaisons into the community for the purpose of planning with officials that may be involved in actual disasters (Fire Chief, City Manager, Police and Transportation Administrators).

In this presentation, specific events will be cited to support the preparation of the Emergency Department to safely deal with hazardous materials (HAZMAT) exposures and victim management.

Keywords: administration; disasters; drills; emergency department; hazardous materials (HAZMAT); liaison; nurses; planning; policies; preparedness; procedures; protocols

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Northeastern North America Ice Storm Tests Disaster Medical Assistance Teams' Preparedness

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In January 1998, a severe ice storm struck areas of northeastern United States. Several consecutive days of rain combined with ground temperatures below freezing layered thick coats of ice on trees, roads, and buildings that paralyzed many communities. The weight of the ice snapped trees, causing power outages from damaged electrical towers and power lines. Loss of power and heat in many areas brought life to a standstill during the coldest time of the year and challenged municipal resources. The ice damage closed many doctor's offices and several hospitals.

The Massachusetts Boston and Worcester-based Disaster Medical Assistance Teams (DMAT) deployed team members to northern New York State to assist with medical services. Physicians, Paramedics, Nurses, EMTs and other medical support personnel from Massachusetts used four-wheel drive vehicles to transport the

team and supplies to a hospital in Plattsburgh, New York. The medical personnel assisted staff by supporting the emergency medical services (EMS) system and staffing the hospital's wards and Emergency Department. The DMAT efforts provided relief for an overworked staff and overburdened system. Patients were treated for a wide variety of complaints, in addition to exposure to cold conditions and carbon monoxide poisonings from improper use of portable heating units. Teams were sent into nearby communities to evaluate the needs of individuals unable to leave their homes. A shelter utilizing DMAT personnel was set up in the hospital for people unable to return home. The extreme cold and frozen conditions persisted during the period of the deployment stressing those assisting with this disaster.

Conclusion: This hospital-based deployment presented a challenge to DMAT teams that train to function as independent medical units, but all involved worked hard and learned that flexibility is required in any disaster situation.

Keywords: assistance; cold; disaster medical assistance teams (DMATs); frozen; home-bound; ice storm; preparedness

General Session XIV

Trauma III

Wednesday, 13 May, 16:00–17:00 hours

Chair: Peter Baxter, Hisashi Sugimoto

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Diagnosis and Treatment of Traumatic Disruption of the Thoracic Aorta

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Purpose and Method: Traffic accidents are increasing in frequency in Japan. Ten cases of traumatic disruption of the thoracic aorta were encountered during ten years at Sapporo Medical University School of Medicine. These cases were analyzed.

Results: Nine cases were male, and one case was female. The average age was 50 years. The causes of the injuries were a traffic accident in seven cases and a fall in three cases. Six out of ten (60%) disruptions were located in the aortic isthmus. Among eight acute cases, four cases survived following surgery and one case survived after massive blood transfusion and intensive care. Two other cases of a chronic type were operated on seven months and 10 years after the accident, respectively; both were doing well. Three patients died of multiple organ failure and abrupt aortic rupture before surgery. Four recent cases were diagnosed by an enhanced computerized tomography (CT) with a helical scan. Digital subtraction angiography and trans-oesophageal echo were done when needed. A heparin-bonded artificial lung and centrifugal pump were used for three recent cases of multiple traumas. In one case, they were used for support following respiratory

failure, and in the two other cases, they were used to repair the aortic disruption.

Conclusion: Early diagnosis and surgical treatment are the appropriate treatment for aortic disruption. The use of a heparin-bonded, artificial lung and centrifugal pump is advantageous because they make possible a reduction in the dosage of heparin in the cardiopulmonary bypass at the time of traumatic aortic disruption.

Keywords: aortic disruption; artificial lung; incidence; pump, centrifugal; survival; thoracic aorta; trauma; treatment

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Learning from the Diagnosis and Treatment of Ruptured Abdominal Aortic Aneurysms

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Eighteen cases with a ruptured Abdominal Aortic Aneurysm (AAA) admitted from 1986–1998 are reported. Six cases died, mortality was 30%. The site of rupture was mainly around a renal artery (seven cases; four survived). One case of AAA that ruptured to the portal vein survived; there were two cases of AAA that ruptured into the inferior vena cava, and one case died; there were two cases of AAA that ruptured into the duodenum, and one case died. The most severe rupture split was 4 cm in length. In this group, eight cases were blocked at subphrenic aorta, and nine cases of AAA were blocked by thoracotomy. The longest duration of rupture was 72 hours, and the shortest was four hours, with the average of 24 hours. Mortality was related to the duration of rupture, site of rupture, length of rupture, and the presence of other diseases.

Keywords: abdominal aortic aneurysm; aneurysm; surgical repair

G-69

Severe Hydrazine Sulfate Toxicity Responding to Pyridoxine Therapy

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Introduction: Hydrazine and its derivatives have been known for more than a century. An interesting pharmaceutical use of Hydrazine Sulfate is as an anti-cachexia agent; it is widely used by those who believe in alternative forms of cancer therapy.

Case Report: We report a patient with serious neurotoxicity from Hydrazine Sulfate who responded to high dose Pyridoxine. The patient was a 76-year-old male who was diagnosed with an inoperable oesophageal cancer. He declined dilatation and stenting of the lower oesophagus. In his quest for alternative anti-cancer therapies, he "surf" the Internet and decided to treat himself with Hydrazine Sulfate. He imported Hydrazine Sulfate tablets from the United States. He then took 180 mg/day for two weeks and increased to 360 mg/day for five weeks.