

diac arrests occur mainly in the victim's home. From these data, there appears little evidence to support large-scale deployment of public access defibrillators.

Key words: arrest; cardiac; defibrillators; homes; out-of-hospital; public access; public places; Utstein style

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Asystole Cardiac Arrest in Melbourne, Australia

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Introduction: Out-of-hospital cardiac arrest (OHCA) claims approximately 2,000 victims in Metropolitan Melbourne each year. Ventricular fibrillation (VF) and ventricular tachycardia (VT) are the common presenting rhythms found by the EMS-providers for Melbourne, the Metropolitan Ambulance Service (MAS). Asystole is less commonly encountered. International studies have shown that the survival rate of OHCA presenting as asystole is very poor. This study investigated victims of OHCA who presented to the MAS in asystole.

Results: In a 12-month period, 778 patients met the entry criteria. The mean value for age was 67.2 years, 36% were female, 64% male. Response time was a mean of 9.8 minutes. Resuscitation was commenced on 37% of patients. There was one survivor (0.12%).

Conclusion: Adult victims of OHCA presenting as asystole should not receive treatment.

Key words: arrest; asystole; cardiac; out-of-hospital; survival

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Advanced Life Support Skills of Emergency Department Staff

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Introduction: Cardiac arrest is a common event in emergency departments. Survival from cardiac arrest can be used as a measure of performance of an emergency department (ED), and can be used as a tool for comparing emergency departments. In the prehospital setting, ventricular fibrillation (VF) is the most commonly recorded rhythm. There are no Australian data that indicate the most common cardiac rhythm found in patients who arrest in the emergency department. Prompt, safe defibrillation is the treatment most likely to improve survival after VF. Optimum effect from defibrillation occurs within 90 seconds of onset of VF. The aim of this study was to determine whether VF could be identified and managed adequately in an ED setting in accordance with the resuscitation protocol prescribed by the hospital.

Methods: The ED staff of a tertiary referral hospital were

assessed as to their ability to manage patients with VF. The subjects for this study were staff volunteers from the medical and nursing staff from the ED. The subjects were asked to manage, without warning and apparent prior knowledge, a simulated patient in VF. The study took place in the hospital setting known to the subject.

Results: The time to defibrillation varied between staff type and appointment level with the majority of subjects achieving defibrillation within the 90 second time frame.

Conclusion: The results suggest that teaching, training, and testing of ED staff in the management of VF be improved, and that there may be a role for the use of Automated External Defibrillators in the ED setting.

Key words: automatic external defibrillator; ability; defibrillation; emergency department; staff; training; treatment; ventricular fibrillation

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Earthquake in Armenia of 1988

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A total of 3,232 children have suffered from the earthquakes in Armenia in 1988. Of these, 2,007 (62.1%) sustained various damages to the locomoto apparatus. Of these, 653 (32.5%) sustained closed fractures, 286 (14.2%) sustained open fractures, and 377 (18.8%) children had crush-syndrome.

The medical care was provided in two stages: (1) pre-hospital first aid (control of bleeding, application of aseptic bandages, anesthesia, immobilization, and transport) was implemented at the place of incident; and (2) The full complement of the aid to victims at the site not always was implemented because the crews providing the first aid did not have adequate supplies of medical equipment. In this series of cases, some victims were delivered to a hospital without having any first aid.

The greatest difficulty with the treatment has arisen for those victims not treated in specialized clinics. The errors in treatment for this group of the patient have resulted in development of contractures of joints, high-gravity palsy of extremities, deformity of segments, and quite often, led to amputations. Many errors were made at rendering assistance to children with high-gravity, open fractures, and with the syndrome long-time compression (LTC). The vast cuts of extremities made in last cases, complicated the condition of the patients due to secondary wound infections and padding intoxication. We were forced to perform amputation in five of them. We performed fasciotomies only when ischemia of extremities was threatening and definite intoxication from several small approach. Three patients with the high-gravity form of LTC developed of an aseptic necrosis the head of the hip.

Analysis of results of treatment LTC of extremities has shown the ineffectiveness of using during the first days, compression-distraction apparatus or fulfilment of a sub-

merged osteosynthesis in connection with increased swelling of an extremity.

Key words: amputations; aseptic necrosis; crush syndrome; earthquake; fractures; infections; treatment

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Being on the Alert in Hospital Services: Estimate of Preparation of the Emergency Staff for Facing an Influx of Victims

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Introduction: In the anticipation of a great number of victims following a catastrophic event, every hospital has an intervention plan ready to face that exceptional situation. The aim of that plan of alert of in-hospital services (MASH plan) is to optimize the reception and the treatment of the victims of that particular catastrophe, and take care of the usual emergencies at the same time. It also must allow for the reception of the victims' families. The emergency staff represents the first line in the good development of an exceptional situation. Every member of that staff, whichever his/her charge is, should know the existence of the MASH plan, how it works, what has to be reorganized in his/her service, and the part s/he has to play, as modest as it can be.

Methods: A survey was conducted in February 2001, among the emergency staff of Saint-Vincent, a 170 bed General Hospital in Lille, to identify what knowledge of the MASH plan they had. That survey consisted of 20 simple questions essentially aiming at four main points: (1) the alert, (2) the practical organisation of the emergency service, (3) the reception of the victims, families, and people involved, and (4) the part everyone must play.

Results: The survey was completed by 92.8% of the emergency staff (65/70). The average longevity was 4.7 years. The name "MASH" was unknown to 16.9% of the staff; 36.9% of the staff had no idea where the reception of the victims is, and 90.8% had no idea where the reception of the families is. A large majority (87.7%) of the respondents didn't know their part in case the MASH plan is started, and only 7.7% know how to reorganize the emergency service in that case.

Conclusion: Considering these points, information sessions have been organized to improve the efficiency of the staff in case of an influx of victims. The staff will be reevaluated using the same questionnaire, the objective being to get 50% right answers for each question. The members of the emergency team will be asked to update and improve the Saint-Vincent hospital MASH plan.

Key words: emergency department; families; hospital; MASH; multiple casualties; organization; plan; preparedness; training

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The Impact of Euro 2000 on Activities of All Emergency Departments of the City of Brugge

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Introduction: Organization of huge sports events always is associated with an increase in medical risks. Public authorities warn hospitals to increase the number of medical doctors and nurses in the Emergency Departments during these events. Political authorities are put under high public pressure to ensure an increased medical deployment.

In the city of Brugge, three qualifying football matches and one quarter final were played. No game was considered risky by the organizing committee. A literature review defined the expected risks, and hence, the resources that needed to be deployed. Prior football games with severe mass riots were analysed regarding the effective hospital admission rate. This analysis helped us decide to use the daily emergency medical care to provide the backbone for medical deployment. Three mobile intensive care units were deployed in the stadium. In addition, we used the usual provincial disaster plan to upgrade our medical supplies in case of mass casualty emergencies.

Methods: During the whole tournament, both emergency departments of the city of Brugge collected data about Euro 2000-related pathology. Data regarding the pathology treated in the stadium as well as for all patients admitted to the hospital were reviewed.

Results: These data confirm that the organization of a European football tournament does not increase significantly the activities in the emergency departments of a "play-city". Only 24 Euro 2000-related patients visited the emergency departments during the whole tournament. The majority of their pathologies were alcohol-related. The daily increase in patients never exceeded 8%. Only two patients had to stay in the hospital for a period of more than 12 hours. Even analysis of the data of the days that the home nation, Belgium, was playing did not show any statistical increase in admittance rate of patients.

Conclusion: We conclude that political instances as well as public opinion put high pressure on the medical authorities during major sports events. However, the data collected proved that preparedness and a higher level of alertness is sufficient to guarantee a high level of medical safety.

Key words: alcohol; emergency departments; mass gatherings; patient loads; sports events

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Do Computer Programs Perform Better Than Human Regulators in Mass Casualty Disasters?

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