

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

E-mail: alastaie.meyer@mh.org.au
Prehosp Disast Med 2001;16(2):s49.

Asystole Cardiac Arrest in Melbourne, Australia

Dr. Alastair Meyer

Royal Melbourne Hospital, Parkville, Victoria,
AUSTRALIA

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

E-mail: alastair.meyer@mh.org.au
Prehosp Disast Med 2001;16(2):s49.

Advanced Life Support Skills of Emergency Department Staff

Dr. Alastair Meyer

Royal Melbourne Hospital, Parkville, Victoria,
AUSTRALIA

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

E-mail: alastair.meyer@mh.org.au
Prehosp Disast Med 2001;16(2):s49

Earthquake in Armenia of 1988

**Prof. George Mboyan; Dr. Sargsyan Hovhannes;
Dr. Koloyan Garen**

University Childrens Hospital N1, Department of the Children's Trauma and Orthopedia, Yerevan, ARMENIA

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-