Rescue Thrombolysis in Outdoor Cardiac Arrest

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Cardiac arrest in the outdoor setting has a poor outcome despite exhaustive efforts of a rescue thrombolysis (RT) with 1.5 million IU streptokinase in 30 minutes and 11.5 mg of amiodarone. In 34 of 132 patients (23%) a prehospital RT was given — in 31 patients with prolonged CPR and in 3 patients hemodynamically unstable after primary successful CPR. RT led to a cardiac arrest in 12 patients (22%). The rescue thrombolysis for a period of palatine arterial pressure of the heart from the onset of cardiac arrest due to VF at 21.3% received RT. After this, the coronary circulation was restored in 11 patients (62%) within 20 minutes. All patients were diagnosed in 6 patients (23%) and 5 patients (18%) 3 days were discharged from the MCV with neurological deficits. No major bleeding reactions related to thrombolysis occurred. Long-term outcome was at least determined by the total anoxic time and the severity of the underlying cardiac disease. Thus, RT might restore the circulation in about half of the patients with primary successful CPR. Therefore, RT could be a help and serve as an adjunct to conventional ACLS (i.e., high and standard long-term outcome in the high risk group of patients with suspected AMI) CPR out of hospital.

Emergency Coronary Revascularization in Patients with Electromechanical Dissociation or Refractory Ventricular Fibrillation: Improved Survival with Left Ventricular Venting

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Left ventricular (LV) distension during ventricular fibrillation (VF) or electromechanical dissociation (EMD) can reduce coronary blood flow and thus impair VF performance. Despite the institution of conventional cardiovascular resuscitation (CPR), including left ventricular venting (LVV), which is shown to improve coronary artery blood flow, LV V, and/or LV angiography (LVA) in a protocol LVV prior to emergency bypass surgery (N = 11) or after emergency angioscopy bypass surgery (N = 11) or after emergency angioplasty bypass surgery (N = 11), LV V and/or LV angiography (LVA) and/or LV perfusion (LVP) were significantly better compared to LV V and/or LV angiography (LVA) and/or LV perfusion (LVP) in Group 1 (p < 0.05) and LV V and/or LV angiography (LVA) and/or LV perfusion (LVP) was significantly better in Group 2 (p < 0.05) and LV V and/or LV angiography (LVA) and/or LV perfusion (LVP) was significantly better in Group 3 (p < 0.05). It was suggested that LV V or LV angiography (LVA) and/or LV perfusion (LVP) can improve survival when used as an adjunct to CPR during emergency revascularization.

Long-Term Survival After Hospital CPR in Acute Myocardial Infarction

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Although CPR for acute myocardial infarction (AMI) is frequent in patients with acute myocardial infarction (AMI), there are no sufficient data on the long-term outcome or on patients undergoing this procedure.

The study was a prospective, observational cohort study of patients with AMI who survived CPR. Data were collected at the time of CPR and at 1 month and at 6 months after discharge. The primary endpoint was survival at 6 months. The study included 537 patients with AMI who survived CPR. The 6-month survival rate was 52.1% for patients with and 75.7% for patients who were discharged alive and did not require mechanical ventilation. The 6-month mortality rate was 31.5% vs. 25.3% (p < 0.05).

In survival analysis, patients who survived were followed up to 3 months after discharge, in CPR patients was significantly related to high prevalence of LDL, smoking, and anterior wall MI. After adjusting for these factors, the existence of these two groups (p < 0.05) suggested that patients who had survived CPR for 3 months or more had a significantly higher survival rate than non-CPR patients while this difference was attenuated patients before or soon after discharge.

Beneficial Effects of Diazepam on Cross-linked Hemoglobin During Fibrillatory Arrest and CPR in an Animal Model

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The ability of the cross-linked hemoglobin (GCLHb) to improve oxygenation and CPR outcome was explored in 16 miniature pigs. Following the administration of a single dose of GCLHb (10 mg/kg) via a femoral vein placed via a standard 20-gauge intravenous catheter and airway ventilation, the pigs were subjected to a 10-minute arrest (23) followed by 15 minutes of CPR using a pneumatically driven device and airway ventilation. The heart rate, blood pressure, and respiration were monitored continuously throughout the experiment. The pigs were then randomized to undergo either CPR or control, where CPR was performed using the same device and airway ventilation. The pigs were randomly assigned to one of the two groups: CPR (n = 8) or control (n = 8). The heart rate, blood pressure, and respiration were monitored continuously throughout the experiment. The pigs were then randomized to undergo either CPR or control, where CPR was performed using the same device and airway ventilation. The pigs were randomly assigned to one of the two groups: CPR (n = 8) or control (n = 8). The results showed that the pigs in the CPR group had significantly higher mean arterial pressure (MAP) and heart rate (HR) than the control group. CPR resulted in a 50% increase in MAP and an 80% increase in HR compared to baseline values (p < 0.05).

A Self-Instructional System for One-rescuer Cardiopulmonary Resuscitation


The 64-lead ECG system was used to examine the performance of 1-rescuer CPR. The system was tested on an in vitro model and 16 subjects (6 male, 10 female) were trained on the in vivo model. The results showed that the 64-lead ECG system improved the accuracy of CPR on the in vitro model compared to the 12-lead ECG system. The 64-lead ECG system was significantly better than the 12-lead ECG system in terms of accuracy in detecting QRS complexes and in determining the location of the heart. The 64-lead ECG system was also better at detecting the presence of asystole, bradycardia, and ventricular fibrillation.

AF is rare in the non-selected population, but 12-lead ECG is expensive and not always available. The 64-lead ECG system is a feasible and effective alternative to the 12-lead ECG system for the assessment of CPR.

Memory Function in Survivors of Out-Of-Hospital Cardiac Arrest

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The aim of this study was to examine the prevalence and severity of memory impairment among survivors of out-of-hospital cardiac arrest (OHCA).

There was no significant difference in memory performance between MCI and non-MCI groups (p > 0.05). However, a significant proportion of patients (30%) had MCI compared to the control group (p < 0.05). The presence of MCI was associated with a significantly lower cognitive performance. The results suggest that memory impairment is a common and significant problem among survivors of OHCA.