

## Poster Presentations—Theme 5: Hot Topics

### (98) Epinephrine for In-Hospital LUCAS-CPR: A Predictor of Outcome?

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**Introduction:** The role of epinephrine in cardiac arrest still is debated. This study compares the doses of epinephrine administered to patients who had good outcomes after in-hospital LUCAS-CPR as opposed to those with bad outcomes.

**Methods:** From February until June 2006, LUCAS-CPR was used for all cases of adult in-hospital cardiac arrest, after the arrival of the in-hospital emergency team. Outcome parameters such as return of spontaneous circulation (ROSC) and Cerebral Performance Categories (CPC) at three months and administered doses of epinephrine were recorded. Cerebral Performance Categories one or two after three months were considered good outcomes. Epinephrine (1 mg) was administered to all patients during CPR every three to five minutes, according to the 2005 Guidelines, and at the discretion of the attending physician.

**Results:** Thirty-five patients received in hospital LUCAS-CPR. In one patient with no ROSC, the dose of epinephrine remains unknown. In the 22 patients with ROSC, a dose of  $1.25 \pm 1.25$  mg of epinephrine was used. In the 12 patients with no ROSC, the average dose was  $6.08 \pm 3.63$  mg. In the nine patients with CPC one or two after three months, the dose of epinephrine was  $1.11 \pm 0.78$  mg. None of these patients received more than 2 mg of epinephrine. In the 25 patients with CPC three, four, or five, the dose of epinephrine was  $3.62 \pm 3.61$  mg.

**Conclusion:** The total dose of epinephrine used is inversely related to outcome. There were no good outcomes achieved in patients who needed more than 2 mg of epinephrine during in-hospital LUCAS-CPR.

**Keywords:** cardiac arrest; Cerebral Performance Categories; cardiopulmonary resuscitation (CPR); epinephrine; outcomes

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### (99) Drug Abuse and Emergency Medical Service Ambulance Mobilization in the Metropolitan Context

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**Objective:** The aim of this study was to analyze the profile of drug abuse-related emergency medical services (EMS) response in a metropolitan district.

**Methods:** The total number of drug abuse-related emergency calls during the year 2005 that were received by the Operational Center of the Hellenic National Centre for Emergency Care (EKAB) in Athens, Greece, was analyzed retrospectively. A step-by-step approach was applied that

focused on the operational scheme: ambulance mobilization, arrival at scene, and transportation to the hospital. The performance of the four available means of response (basic life support ambulances, mobile intensive care units (MICUs), motorcycles, and super mini city cars) was evaluated. **Results:** Within the study period, 5,836 cases were recorded (2% of all emergency calls) and 3,899 calls occurred within the municipality center of Athens.

Only one-third of these cases were transported to the hospitals; 10% of calls were cancelled before the arrival of the ambulance on scene; 20% could not be found on the site, and 36% refused transport to the hospital. Super mini city cars and motorcycles seemed to have better performance in comparison to conventional ambulances. The cancellation rate was significantly higher in the evening (70%) and at night (67%), as well as in the summer (69%) and autumn (70%).

**Conclusions:** Drug abuse-related calls represent a large part of the workload for the EMS of Athens. This study revealed that the major burden is imposed upon the center of the capital, possibly due to the socioeconomic factors that affect the residents of this area. A considerable proportion of the responses do not result in the patient being transported to a hospital.

**Keywords:** ambulance; drug abuse; emergency medical services; hospital transportation; metropolitan

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### (100) Study of Antagonism in Disaster Management Plans with Emphasize on the Reconstruction Period

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Disaster management plans provide insight into many probable situations after the occurrence of a disaster. The post-disaster situation is a function of specifications of both the environment and the disaster. Due to the nature of disasters and the uncertainty of unusual conditions, many factors can impact the situation after disasters.

Antagonism is a usual specification in the nature of disasters, which originates from environmental conditions. At least two parameters can cause antagonism in disasters—spatial and time dimensions of space.

The object of this study is to analyze unusual conditions in order to recognize the main parameters in dimensions of space that can cause antagonism in disasters. Therefore by classifying the main object of research to three groups, specifications of them was studied. This research selects a cross-sectional period of time of management after disasters (reconstruction) and studies its specifications.

The results of this research indicate that antagonism in all phases in disaster management plans is a consequence of the nature of disasters, so that, in the reconstruction management plan, antagonism has an important role in the plan efficiency and can change the outcome of the use of disaster plans in the same conditions.

**Keywords:** antagonism; disaster; disaster management; plan; reconstruction

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