

(132) Metabolic Encephalopathy in Prehospital Medicine

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Introduction: Metabolic encephalopathy describes any process affecting global brain function by altering its biochemical function.

Objectives: The purpose of this study was to investigate the cases of metabolic encephalopathy in prehospital medicine that are focused on epidemiological characteristics of the patients, on the etiology of mental status deterioration, and on emergency stabilization.

Methods: The medical records of 150 patients with metabolic encephalopathy were examined retrospectively.

Results: Of the patients examined, there were two different age groups. In the group of the young patients (18–37 years of age), 57 patients were examined (41 men and 16 women). The mean value of the ages was 22.5 years, and the leading cause was an overdose of narcotics (56 cases). One case victim had hypoglycemia. In the group of older patients, (42–87 years of age), 93 patients were examined. In this group, there were 32 women and 26 men with a mean values for the ages of 68.7 years. In 26 cases, a hypnotic agent overdose was suspected. In 23 cases, hypoglycemia was detected, in 18 cases hyperglycemia, in eight cases hepatic failure, in five cases renal insufficiency, and 13 cases, implicated electrolyte abnormalities.

Conclusions: Metabolic encephalopathy should be suspected when an altered mental status is seen in the absence of focal neurologic signs or an obvious anatomic lesion is present. High index of suspicion is required in the treatable or in the life-threatening cases in the prehospital medicine in order to reverse the action of the responsible factor.

Keywords: metabolic encephalopathy; prehospital

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(133) Oncologic Emergencies in Prehospital Medicine

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Introduction: Prehospital medical staff must confront oncological patients with various medical problems. A small percentage of them may represent a medical emergency. The aim of this study was to analyze the cases of oncological emergencies focusing on the epidemiological characteristics of the patients, the etiology, and the emergency management in the prehospital phase.

Methods: The records of 62 patients with oncologic emergencies who were encountered initially in a medical mobile unit were analyzed retrospectively.

Results: In 45 cases, the main symptom was an acute episode of severe dyspnea, tachypnea, and shortness of breath or respiratory insufficiency that could be due to neo-

plasms affecting the lungs. Possible pleural effusions were detected in nine cases. In two cases, superior vena cava syndrome was detected. Seizures were detected in five patients with neoplasms affecting the brain and in six patients elevated intracranial pressure with the main sign the decreased level of consciousness was suspected. In five patients, the clinical evaluation revealed ascites producing a state of low peripheral perfusion due to elevated intra-abdominal pressure.

Conclusion: Oncological emergencies generally require prompt treatment not always feasible in the ambulance. Monitoring of the cardiac and respiratory function, and generally supportive measures such as IV volume expansion and supplemental oxygen, should be provided as needed while transporting patients to the hospital for definitive therapy. Only a small percentage of oncological patients received the application of specific therapeutic modality during the prehospital stage.

Keywords: emergency medicine; oncological emergency; prehospital; symptoms

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(134) Poisoning in Prehospital Medicine

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Introduction: The medical staff in the prehospital setting often is faced with poisoned victims. The aim of this study is to present the epidemiological characteristics of such patients, the clinical presentations, and the specific management in a mobile medical unit.

Methods: A total of 165 patients with poisoning were evaluated. There were two age groups with the most poisoning incidents: infants and young persons. In infants, all the cases represented accidental events, while the second age group consisted mainly of suicide attempts.

Results: Of accidental pediatric poisonings, there were 36 children with a mean age of 2.7 years, and a range of 1.2–4.8 years. Of adult poisonings, there were 129 cases of drug intoxication. 115 were female with a mean age of 28.7 years and a range of 15–68 years. While single-agent intoxication was noticed in children, the adult overdoses often involved several agents.

The main management steps of drug intoxication victims in the prehospital phase are resuscitation and stabilization. This involves ensuring adequate airway, breathing, and circulation control before instituting gastrointestinal tract decontamination, hastening elimination of poisons from blood and tissues, and specific antidotal therapies. The drugs involved generally are the broadly utilized drugs, such as cardiological, and antimicrobial agents, analgesics, and sedative drugs.

Conclusion: Supportive care remains the primary strategy for most poisoned patients, which includes monitoring, respiratory care, and cardiovascular therapy. Prophylactic intubation may be required in the prehospital setting.

Keywords: adult poisoning; drug intoxication; pediatric poisoning; poisoning victims; single-agent intoxication

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