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ACCIDENTAL HYPOTERMA: PROGNOSIS AND OUTCOMES
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Objective: To assess clinical characteristics and outcomes of patients admitted for accidental hypothermia, and to identify risk factors for mortality.

Methods: Design: Retrospective cohort-study. Setting: Emergency department (ED) of a tertiary hospital. Study population: All 15 consecutive patients admitted to the ED and with discharge diagnosis of accidental hypothermia, between 1995 and 2003. Intervention: Chart review. Measures: Severity of hypothermia was classified, according to core temperature, as mild (35 °C to 32.2 °C), moderate (< 32.2 °C to 28 °C), and severe (< 28 °C); mortality, socio-demographic, and clinical characteristics. Factors related to mortality.

Results: Mean age was 57 ± 22 yr. (range 23-88). At ED admission, the distribution of patients by severity of hypothermia was 10 (64%) mild, 4 (27%) moderate, and 1 (9%) severe. Clinical characteristics included average Glasgow Coma Scale of 9, systolic blood pressure 99-33 mmHg, heart rate 66 ± 23 per min. Seven (47%) had thrombocytopenia (< 100,000). All patients received active external rewarming and active core rewarming with heated IV fluids. Three (20%) patients had cardiac arrest, 5 (33%) needed mechanical ventilation, and 8 (53%) vasoactive drugs. The mortality rate was 53% (8 of 15). Factors positively associated with mortality included the presence of thrombocytopenia (RR 3.4, p < 0.01), bradycardia (RR 4.1, p < 0.05), and use of vasoactive drugs (RR 5.05, p < 0.001). We found no association of mortality with age, premorbid conditions, alcohol abuse or use of medications.

Conclusions: Accidental hypothermia is an uncommon cause of admission in our hospital but with high mortality rate. Mortality is associated with cardiovascular instability but not with age.

WIRELESS SYSTEM OF COMMUNICATIONS APPLIED TO TRANSPORTING CRITICAL PATIENTS
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Introduction: The Modern Technologies of wireless communication offer great chances with reference to critical medicine (urgencies and emergencies) which have not been used so far. The established protocol of transporting critical patients by ambulance, is done without any communication of the monitoring life-support system to or from the hospital of reference. By reason of a research project of Science and Technology TIC 2003-07953-C02-02, a group made up of investigators from both the University of Almería and Torrecardenas Hospital, have developed a system of wireless communication for standard medical monitors. Up to now, there is no record of the developing of specific systems for a long-distance wireless monitoring in ambulances, through systems that can create a standard.

Objectives: 1) Developing and assessment of a wireless system of telecommunications which integrates different technologies (special sensorial, biotelemetry, communications through radio, getting and treating data in real time, etc.) installed in an ambulance for the transmission of biomedical signs of a critical patient, and the reception of it in a hospital. 2) To assure a better attention and care during the transporting. 3) To fit the diagnostic and therapeutic resources to the characteristics of the patient as it arrives to the hospital, influencing its evolution and final clinic situation, which improve its quality of life.

Design and Methods: To achieve the project we have developed a wireless system of communications with local processing incorporated, which allows intelligent and real time transmission of biomedical signs, alarms and other parameters of the medical monitor to a long-distance node receiver placed in the hospital of reference. The system also allows repetitions in the channels of communications with a technology based on radio modem and GPRS, and a safe code of the information transmitted.

Results: Up to now, a trial system of communications is being tested, and it seems to be validated from both the technical and medical points of view.

Conclusions: With this system installed in ambulances for the transporting of critical patients, we can achieve: 1) To assure a better attention and care of the patient during the transporting, as the staff in the ambulance receive in real time, direct instructions from the people in charge of the ICU (Intensive Care Unit), according to the information received in the hospital. 2) To fit the diagnostic and therapeutic resources to the characteristics of the patient when it arrives to the hospital, because there is already all the information transmitted during the transporting. 3) By these means, ailments could be treated immediately and so, we could attend earlier and faster the initial and acute complications that may arise which can risk the patient's life or cause its final clinical evolution, thus improving its quality of life.

VARICELLA PNEUMONIA IN ADULTS. A REVIEW OF 10 YEARS
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Objective: To analyze the main epidemiological characteristics and the clinical and laboratory manifestations of primary varicella pneumonia (VP) in patients admitted to an intensive care unit (ICU) and the differences within the patient admitted due to VP in the rest of the hospital.

Method: Retrospective study of the adult varicella pneumonia (VP). We evaluated clinical, therapeutic and evolutive features in the last 10 years (1994-2004). The study was carried out in the University Hospital, a third level hospital with 34 ICU beds. The diagnosis was established by clinical and radiological criteria along the varicella infection process. We recorded age, sex, admission type, length of stay, antecedents, smoking habits, previous contact with patients with varicella, clinical and laboratory findings, associated infections, chest radiograph, needed for mechanical ventilation, complications, pharmacological treatment and survival. We examined the influence of the duration of respiratory symptoms and rash prior to admission. It’s a descriptive study, we analyzed the main characteristics in ICU patients, and compared them with those of patients admitted in hospital. Comparison was performed by using χ² test and ANOVA. A p < 0.05 was denoted statistical significance.

Results: Forty four patients were included in the study. Ten of them in ICU (8 women (80%) and 2 men (20%)), mean age 28.4 years. Sixty percent of patients were admitted of Emergency department, and twenty percent died. Length of stay in ICU 14.2 days, and in the hospital was 20.2 days. Respiratory failure is always the ICU admission reason. Antecedents: 60% of smokers, previous contact with varicella patients 40%, some medical antecedents 20%, 40% had fever during the previous 48 h as first symptom. Radiographic change most frequently was bilateral interstitial pattern (60%). Irregularity arterial blood gas, elevated serum LDH and positive HZV serology are present in 100% of cases. Every patient received acyclovir and antibiotics. 40% of cases need vasoactive drugs. 80% showed acyclovir adverse effects (40% gastrointestinal symptoms). 60% need mechanical ventilation. Evolution complications ARDS (40%) and associated infections (80%). thirty four patients didn’t need ICU: 70% males mean age 32.64 years, length of stay 11 days. Medical antecedents are present in 29%, 76% smoked. Most common first symptom was exanthema (47%) during the first week. Chest x-ray: similar to ICU patients. Arterial blood gas determination was abnor-