Chirurgia (Bucur). 2013;108(3):385-388

The Importance of Early Diagnosis of Sepsis in Severe Burned Patients: Outcomes of 100 Patients

C. Orban[1], D. Tomescu[2]
[1]Fundeni Clinical Institute, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
"Nicolae Testemițanu" University of Medicine and Pharmacy, Moldova
Department of Anaesthesia and Intensive Care, Fundeni Clinical Institute, Bucharest, Romania

Abstract
Background/Aim: The burn-injured patient has a major potential to develop an infection because the wound itself, surgical treatment, mechanical ventilation and blood transfusions may potentially lead to a secondary immunodeficiency syndrome.
Patients and Methods: A total number of 100 consecutive burn-injured patients with sepsis were treated in the Clinical Emergency Hospital of Plastic Surgery and Burns, Bucharest, between 2009 and 2011. Their clinical and bioumoral data were analyzed.
Results: Flame was the main cause of burn injuries in the present series (78%). The mean body surface area burn wound was 49.7%. Most of the patients (97%) experienced the first septic episode within two weeks after burn injury. Sepsis was mainly due to Gram-positive (58%) and Gram-negative (26%) bacteria. Staphylococcus aureus (32%) and Pseudomonas aeruginosa (21%) were the most frequently encountered germs. The susceptibility for Gram-positive bacteria was the best for imipenem/cilastatin, followed by amikacin, ceftriaxone and ciprofloxacin. For Gram-negative bacteria, the susceptibility decreased from ciprofloxacin to imipenem/ cilastatin, amikacin and gentamicin. Mortality rate was 9%.
Conclusions: The extensive knowledge of physiopathology, clinics, epidemiology, bioumoral and microbiology features of the sepsis in burn-injured patients allows an early and
precise diagnosis and an adequate and efficient treatment. All these elements have been associated with a significant improvement of the survival rates. Every patient with burn-injured sepsis must be treated as a different entity in order to obtain the best results.
Key words: burn, sepsis, Gram-positive bacteria, outcome

Corresponding author: Carmen Orban, MD
258 Sos. Fundeni, sector 2, 022328, Bucharest, Romania
E-mail: orbancarmen@yahoo.com