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Poster Session II

Infective endocarditis, bacteraemia and sepsis

RESULTS OF AN EARLY INTERVENTION PROGRAM IN PATIENTS WITH BACTEREMIA IN A SECONDARY HOSPITAL. EPIDEMIOLOGICAL AND EVOLUTIVE CHARACTERISTICS

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OBJECTIVES

Bacteremia can produce significant morbidity and mortality. The performance optimized early antibiotic treatment may reduce mortality. The aim of this study is to analyze the impact on the evolution of patients in our center after implementation of a program of early intervention in patients with bacteremia.

METHODS

Since July 2008 there is a multidisciplinary program for early intervention in patients with positive blood cultures in the hospital HCS (except ICU and pediatrics). This is a transversal team formed by physicians from the group of Infectious Diseases-MI and Microbiology Department. Positive blood cultures are notified at an early stage from Microbiology in joint session with the group of Infectious Diseases. A search of all patients and an interview with the physician responsible for the patient are made, performing an assessment for treatment optimization. The result of the intervention was reproduced in a clinical report on computerized patient history

RESULTS

During two years were evaluated 773 episodes of bacteremia in the Costa del Sol Hospital. The gender distribution was 476 men (61.6%) and 297 women (38.4%). The median age was 68 years (14-98). The acquisition place of 320 episodes were community acquired (41.4%), related to health care 280 (36.2%) and nosocomial 173 (22.4%). The main foci were urological 218 (28.2%), abdominal 157 (20.3%), catheter 154 (19.9), respiratory 94 (12.2%) skin and soft tissue 51 (6.6), endocardial / endovascular 15 (1.9%), joint 11 (1.4%). The microorganisms most frequently involved were *E coli* with 246 episodes (31.6%), *Klebsiella sp* 59 (7.6%) *Enterobacter sp* 22 (2.8%) *Proteus mirabilis* 20 (2.6%), *Pseudomonas aeruginosa* 27 (3.5%), *Staphylococcus coagulase-negative* 172 (22%), *Staphylococcus aureus* 65 (52 MSSA and 13 MRSA), *Enterococcus faecalis* 19 (2.5), *Enterococcus faecium* 9 (1.2%), anaerobes 17 (2.3 %), *Candida sp* 10 (1.3%). Enterobacteriaceae producing extended-spectrum beta-lactamase originated 37 episodes (4.8%). Thirty-four patients (4.4%) had died and 119 were found at home when patients were located. With respect to intervention on antimicrobial treatment in 350 cases (45.3%) no modifications thereof, in 28 cases (3.6%) extended the duration of treatment and in 396 (51.1%) were a modification to optimize it. The healing was complete in 639 episodes (82.7%), death in the first 7 days attributable to bacteremia 62 (8%) and death not attributable to bacteremia (> 7 days without symptoms relatable) 47 (6.1%). 26 patients were transferred to other hospitals without knowing the final outcome (3.4%)

CONCLUSIONS:

- The existence in the clinical practice of early intervention programs for patients with bacteremia, determine a quick and appropriate antimicrobial therapy optimization and secondarily a decrease in mortality.
- In 51% of cases in our series underwent optimization of treatment, with early mortality attributable to bacteremia / sepsis low (8%) compared with literature data