EV0630

ePoster Viewing

Epidemiology of nosocomial infections

Prognosis of bacteraemia in hospitalized patients with liver cirrhosis: a descriptive study

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Infections are a major cause of heart failure, and overall morbidity and mortality in patients with liver cirrhosis. The most common syndromes are: spontaneous bacterial peritonitis, urinary tract infection, pneumonia and bacteremia without an identifiable focus. Review of clinical records and microbiological-positive blood cultures, of all adult patients admitted to the General Hospital. We obtained demographic, clinical and microbiological data of the group of interest, as well as intrahospitalary mortality of the episode of bacteremia**.**

Methods Review of clinical records and microbiological-positive blood cultures, of all adult patients admitted to the General Hospital Universitario Santa Lucía in Cartagena, Spain, with a diagnosis of liver cirrhosis and a first episode of bacteremia, between January 2008 and September 2013. Cirrhosis was defined as the presence of a physical examination with stigmas of chronic liver disease, laboratory findings and typical ultrasound signs, being necessary two of the criteria mentioned above.

The cause of cirrhosis was determined on the basis of medical history and / or laboratory, and stratification of severity scale was based on the Child-Pugh and MELD score at admission. Moreover, bacteremia was defined as the presence of microorganisms in at least one blood culture. Nosocomial infection was considered when bacteremia was detected more than 72 hours after admission.

Results: During the study period, there were 60 patients with positive blood cultures and liver cirrhosis. Seventy percent of the cases occurred in men and the median age was 59.7 years (range 32-85). The most frequent cause of cirrhosis was alcohol (46%). Ninety-seven percent of the patients had at least one co-morbidity, with alcohol being the most common. In regard to the severity of cirrhosis in patients with bacteremia, the average MELD score was 15.63, and distribution according to Child-Pugh A / B / C was 10% / 45% / 43%. Bacteremia without an apparent focus of infection was the most frequent (27%). Of the isolated agents 56% correspond to Gram positive bacteria, and 33% to Gram-negative bacteria, the latter being the predominant agents in nosocomial bacteremia. The main agents isolated were Streptococcus pneumoniae and E. coli, in 28% no agent was identified. The mortality of cirrhotic patients with bacteremia was higher than the total hospitalized cirrhotic patients, and measuring MELD score after 72 hours had a significant correlation with mortality.

Conclusion Bloodstream infections are more common in cirrhotic patients than in the general population . This is favored by immunosuppression which is determined by liver failure and factors associated with mortality such as alcoholism. Bacteremia is a serious complication and is a poor prognostic factor in hospitalized cirrhotic patients. The MELD score is a simple and reliable measure that could be useful as a prognostic factor in cirrhotic patient with bacteremia.

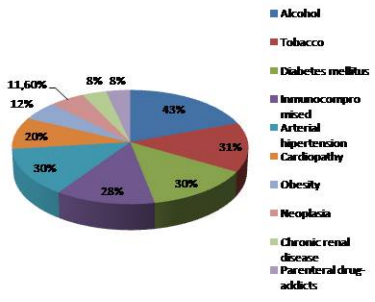

Figure 1. Comorbidities in patients with bacteremia

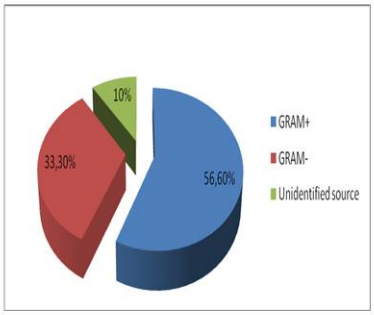

Figure 2. Agents predominant in nosocomial bacteremia