

PROGNOSIS OF BACTEREMIA IN HOSPITALIZED PATIENTS WITH LIVER CIRRHOSIS: A DESCRIPTIVE STUDY

Carrión García F; Baños Madrid R; Gómez Gómez J*; García Vázquez E*; Ródenas Checa J.
Hospital General Universitario Santa Lucía. C/ Mezquita, s/n, Paraje los Arcos, 30202, Santa Lucía, Cartagena. Spain.
*Hospital Clínico Universitario Virgen de la Arrixaca de Murcia. Spain.



Objectives:

To describe epidemiological, clinical, microbiological mortality and outcome features of cirrhotic patients with bacteraemia admitted at a secondary hospital.

Methods:

Clinical records of all cirrhotic adult patients with bacteraemia admitted to Hospital General Universitario Santa Lucía in Cartagena (Spain) were reviewed according to a standard protocol.

The study period was January 2007 to September 2013. Cirrhosis aetiology was determined on the basis of medical and laboratory records and severity stratification was based on the Child-Pugh and MELD score at admission.

Bacteraemia was defined as the presence of pathogenic microorganisms in at least one blood culture.

Nosocomial infection was considered when bacteraemia occurred more than 72 hours after admission.

1: Bouza C, López-Cuadrado T, Saz-Parkinson Z, Blanco J. Epidemiology and recent trends of severe sepsis in Spain: a nationwide population-based analysis (2006-2011). *BMC Infect Dis.* 2014 Dec 21;14(1):717.

2: Kobayashi D, Yokota K, Takahashi O, Arioka H, Fukui T. A predictive rule for mortality of inpatients with *Staphylococcus aureus* bacteraemia: A classification and regression tree analysis. *Eur J Intern Med.* 2014 Dec;25(10):914-8.

Results:

During the study period, for a total of 217 admitted cirrhotic patients, there were 79 episodes of bacteraemia. Seventy percent of the cases occurred in men and the median age was 60 years (range 32-85).

The most frequent cause of cirrhosis was alcoholism (46%) followed by chronic hepatitis C viral infection. The average MELD score was 15.63 and distribution according to Child-Pugh A, B and C was 8,86%, 48,1% and 43%, respectively.

Bacteraemia was considered as primary in 27%. Of the isolated microorganism, 56% were Gram positive bacteria and 33% Gram-negative bacteria, being *Streptococcus pneumoniae* and *E. coli* the most frequent ones.

Mortality rate was 17% in thirty day after diagnosis while mortality in admitted patients with cirrhosis but no bacteraemia was 5%. And in six months after bacteraemia was 43% while in cirrhosis without bacteraemia was 25%.

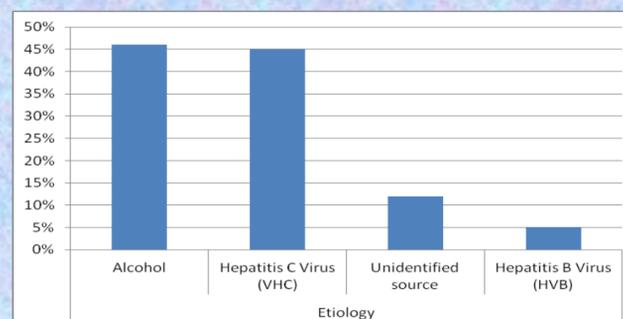
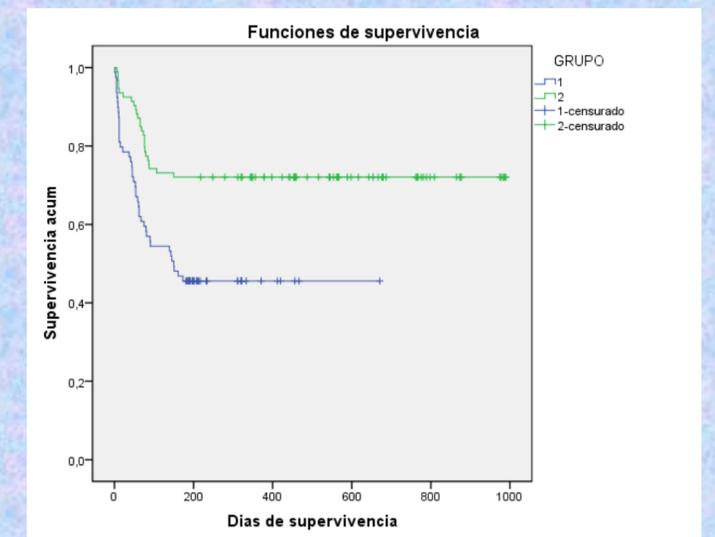


Figura 1. Etiology of liver cirrhosis

Conclusión:

Bacteraemia is a serious complication and is associated to a poor prognostic in hospitalized cirrhotic patients. There were mortality rate statistically significant difference in patients with episodes of bacteraemia.



Group 1: Survival in cirrhotic patients with bacteraemia
Group 2: Survival in cirrhotic patients without infections

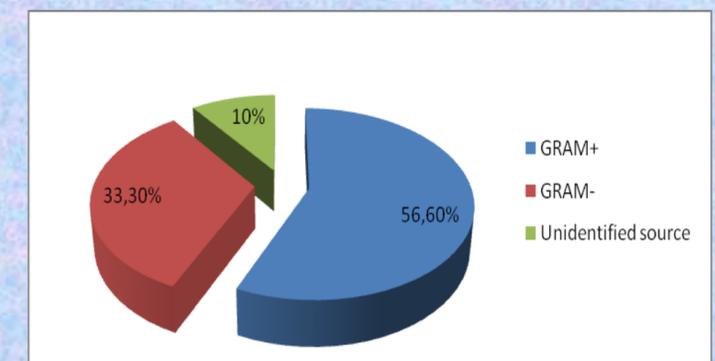


Figure 3. Agents predominant in nosocomial bacteraemia