

MORTALITY AND PROGNOSTIC FACTORS OF LISTERIA MONOCYTOGENES INFECTIONS.

A. Martínez¹, M.L. Fernández¹, I. Piñero¹, J. Fernández², C. Suárez¹, H. Gómez¹, D. Caravia¹, A. Rodríguez-Guardado³
¹Internal Medicine Unit, ²Microbiology Unit, Hospital Universitario Central de Asturias, Oviedo, Spain

OBJETIVOS

Listeria monocytogenes (LM) is an important cause of meningitis and bacteremia. The aim of this study was to describe the predisposing factors for LM infections in adults, in a reference medical center in Spain.

MATERIAL Y MÉTODOS

A retrospective observational study of adult patients with LM infections was carried out from 2006 to 2012. We considered that infection exists if the patients had an isolation of LM in blood and/or CSF and clinical signs of infection.

The identification and antimicrobial susceptibility testing was performed using commercial systems. To define the resistance breakpoints established by the CLSI were used.

The presence of meningitis was defined using the CDC definition. Time to treatment was counted from the onset of meningitis symptoms to the initiation of antibiotic treatment. Mental status was scored using the Glasgow Coma Scale (GCS). Cure was considered if two successive cultures were negative and disappeared CSF clinical signs of infection. Patients were followed until death or hospital discharge.

The Chi-square and Student t test were used to compare the qualitative and quantitative variables, respectively. A value of less than 0.05 was considered statistically significant.

RESULTADOS

34 episodes of infection by LM were included (58% male, mean age 68.58 years).

Five patients did not have any risk factor

| Underlying diseases | |
|----------------------------|-------|
| Cardiovascular diseases | 42% |
| Neoplasm | 38.7% |
| - Haematologic | 33% |
| Chronic liver diseases | 19.4% |
| Diabetes | 16% |
| Previous steroids | 16% |
| Immunosuppressor treatment | 13% |
| Kidney diseases | 9.7% |
| Alcoholism | 6.5% |

RESULTADOS

Twenty-five patients (73.5 %) had meningitis with positive CSF culture. Blood cultures were positive in all patients with sepsis and in 7 patients with meningitis. Seventeen patients (50 %) died as a direct result of the infection. There wasn't significant differences in sex, underlying disease or the presence of meningitis among non-survivor patients (group 1) and survivors (group 2) although 84.2% of non-survivor patients had a meningitis.

Mortality was higher in older patients (68[8] vs 66[18] p=0.011). 92% of non-survivor patients had positive blood cultures (p=0,073) The presence of impaired liver function tests was significantly higher in patients who died (AST 54.92 [29.48] in group 2 vs 165 [237] in group 1, P = 0.002 ; ALT 39 [16] in group 2 vs 158 [308] , p = 0.009 , FA 75 [57] in group 2 vs 248 [312] in group 1, p = 0.034 ; . GGT 74 [72] in group 2 vs 180 [248] in group 1 P = 0.021.

The mortality was higher in presence of higher count of leukocytes (549 [509] vs 1006 [1136] p = 0.002); proteins (210 [133] vs 648 [673] p = 0.026) and glucose (77[19]vs 76[85] p=0,098) levels.

CONCLUSIONS

Mortality is higher in listeriosis associated a older age, meningitis and alterations in liver function test and higher alterations in CSF parameters