

## Title: Listeriosis during the period 2003-2016

Authors:

Eva Barreiro Alonso, Javier Santamaría del Tío, Eva María Fonseca Aizpuru

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Listeriosis during the period 2003-2016

Eva Barreiro-Alonso<sup>1</sup>, Javier Santamaría-del-Tío<sup>2</sup> and Eva María Fonseca-Aizpuru<sup>2</sup>

Departments of <sup>1</sup>Gastroenterology and <sup>2</sup>Internal Medicine. Hospital Universitario de

Cabueñes. Gijón, Asturias. Spain

**Correspondence:** Eva Barreiro Alonso

e-mail: evabarreiroalonso@yahoo.es

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Dear Editor,

Listeria monocytogenes (LM) can cause invasive disease in immunocompromised

patients (1,2). This retrospective study analyzed the characteristics of cases treated at

the Hospital Universitario de Cabueñes (300,000 inhabitants) from January 1st 2003 to

December 31st 2016, previously reviewed from 1991 to 2002 (3). Cases considered:

compatible disease and isolation of LM in a sterile medium. SPSS was used for data

analysis.

Thirty-three patients were diagnosed, with an average age of 64.9 years (35-88 ± SD

15.6); 21 were (63.6%) male. There was a total of 43 cases, which equates to 0.95/10<sup>5</sup>

cases/inhabitants/year (3). Comorbidity was described in 29 (87.9%) cases (Fig. 1).

Disease presentation was fever in 27 cases (81.8%), meningitis in 12 cases (36.4%) and

diarrhea in two cases (6.1%). Fifteen (45.5%) cases had severe complications with the

involvement of the central nervous system (CNS). Positive blood cultures were

identified in 24 (72.7%) cases. These were treated with ampicillin and gentamicin in 12

cases, ampicillin and cephalosporin in six cases, ampicillin monotherapy in five cases

and cotrimoxazole in four cases. There was a favorable evolution in 19 patients (57.6%)

and 14 (42.4%) died, all with a comorbidity.



## Discussion

LM is an under-diagnosed disease of a voluntary declaration although its incidence has increased due to greater awareness of the disease, senescence, immunocompromised individuals and an increased demand of microbiological cultures (4,5). Clinically, it can present as self-limited diarrhea, with a short incubation period that is often underestimated (4). The condition can be severe with high mortality in immunocompromised patients (1,4). The involvement of the CNS was identified as an independent risk factor associated with a higher mortality (4). Diagnosis is confirmed via the isolation of LM in normally sterile sites. Stool cultures are not considered to be useful, due to the existence of LM carriers without clinical disease. The treatment of choice is ampicillin and gentamicin. Cotrimoxazole is administered in penicillin allergic patients (5). The mortality rate can reach 30% (4). In our study, mortality was higher due to comorbidities and the involvement of the CNS. LM infection is potentially serious with a high mortality. A high index of suspicion and early antibiotic treatment are required, especially for immunocompromised patients.

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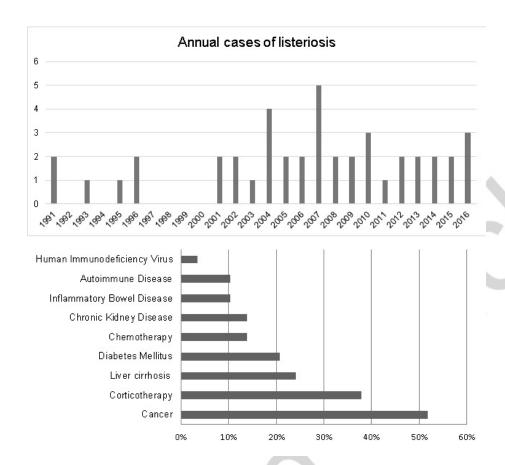


Fig. 1. Histogram of the annual cases of listeriosis. Associated comorbidity.