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## Abstracts Book



## KL12

### LISTERIOSIS IN PORTUGAL: FROM RETROSPECTIVE STUDIES TO THE DETECTION OF THE FIRST CONFIRMED HUMAN OUTBREAK

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*Listeria monocytogenes* is a facultative, intracellular bacterial pathogen of humans and a variety of animal species. In humans, *L. monocytogenes* infections are typically food-borne and cause an invasive and often fatal disease in pregnant women, newborns, infants, elderly, and immunocompromised individuals, with a mortality rate between 20 to 30%. Despite worldwide efforts by research organizations and the food industry to reduce the incidence of listeriosis, this pathogen remains a critical threat to human health and the food supply. In fact the incidence of listeriosis has been increasing in recent years in several European countries, including Portugal and listeriosis was the most frequent cause of hospitalisation and death due to the consumption of contaminated food in Europe in 2008–2011. In Portugal, listeriosis is not a notifiable infection and has, thus, been underestimated.

In the absence of an active microbiological surveillance of listeriosis at a national level, in 2003 a collaborative study with the main hospitals in Portugal and CBQF was established aiming to collect data on listeriosis in the country and to characterize the isolates.

The first data on the incidence of listeriosis, based on retrospective information provided by the hospitals, was published in 2006. The incidence of listeriosis was at least 1.4 cases per million inhabitants for the year 2003.

In 2010 another publication reported an increase in the prevalence of the infection between 2003 and 2007; at least 2.3 cases per million inhabitants for the year 2007.

A sudden increase in the number of cases was observed in January 2010: 12 cases, 6 of which were registered in Lisboa and Vale do Tejo region (LVTR). Twenty-nine more cases were registered until the end of June (17 in LVTR). Isolates were typed by PFGE and 19 matched the same pulsotype. The National Health (DGS) and Food Authorities (ASAE) were alerted of this occurrence. Further investigations in collaboration with DGS and ASAE identified fresh cheese produced by a company located in the Alentejo as the likely food source of this outbreak.

This work was developed by Gonçalo Almeida, Rui Magalhães, Isabel Santos, Vânia Ferreira, Joana Silva and Paula Teixeira, from CBQF, Maria Manuel Mendes, Pedro Nabais, Maria da Graça Mariano Fernandes and Maria Isabel Mâncio from ASAE and Maria Manuela Sousa from ARSLVT.