TITLE: PREVALENCE OF THE AGENT RESPONSIBLE FOR LISTERIOSIS IN TWO GROUPS OF PREGNANT WOMAN, SEROPOSITIVE AND SERONEGATIVE FOR HIV, IN RIO DE JANEIRO STATE.

AUTHORS: PEREIRA, R.C.L.²; FREITAG, I.G.R.¹; HOFER, C.B.²; HOFER, E.¹; VALLIM, D.C.¹

INSTITUTION: ¹LABZOO/IOC/FIOCRUZ - LABORATÓRIO DE ZOONOSES BACTERIANAS/ INSTITUTO OSWALDO CRUZ, RIO DE JANEIRO, RJ (AVENIDA BRASIL, 4365, PAVILHÃO ROCHA LIMA, 3° ANDAR, RIO DE JANEIRO – RJ, BRAZIL); ²PROGRAMA DE PÓS-GRADUAÇÃO EM DOENÇAS INFECCIOSAS E PARASITÁRIAS HUCFF/IPPMG / UNIVERSIDADE FEDERAL DO RIO DE JANEIRO (RUA PROFESSOR RODOLPHO PAULO ROCCO, 255, ILHA DO FUNDÃO, RIO DE JANEIRO - RJ).

ABSTRACT:

Listeriosis is a foodborne disease caused by L. monocytogenes, a Gram-positive bacterium widely distributed in nature. This disease has high mortality, between 20 - 30%, and affects mainly children, elderly, pregnant women and immunosuppressed patients. The aim of this study was to evaluate the prevalence of L. monocytogenes in the feces of asymptomatic (for listeriosis) HIV positive pregnant women participating in the Program of Assistance to HIV Positive Pregnants from the Institute of Child Care Martagão Gesteira / University Hospital Clementino Fraga Filho (IPPMG/UFRJ) and to compare it with the prevalence in HIV negative pregnant women, who attended prenatal visits at the Family Health Units (USF), located in the city of Petrópolis, Rio de Janeiro (RJ), both groups in the third trimester of gestation. The conventional isolation method with selective media and identification by biochemical tests combined with Chain Reaction Polymerase using primers specific for the most commonly isolated Listeria species were utilized to detection and identification of Listeria spp. This study included a total of 213 pregnant women, 73 (34%) infected with HIV and 140 (66%) were not infected with HIV. The prevalence of L. monocytogenes in the HIV positive group was of 2,74% and the prevalence of other Listeria spp. was of 9,59%. In the HIV negative group, 2,56% were positive for L. monocytogenes and 8,58% for other Listeria spp. Most L. monocytogenes strains belonged to serotypes 1/2a, 1/2b, and 4b and no statistic difference was found between the prevalence in the HIV positive and HIV negative groups or between the methods used (conventional isolation and PCR). During this investigation, it was possible to observe that being a carrier of the HIV virus was not a determinant risk factor for the presence of L. monocytogenes. However, it is important to highlight that all patients HIV positive were under HIV retroviral treatment, which may explain way there was no difference in the prevalence of Listeria between these two groups.

Keywords: *Listeria spp.*, HIV positive pregnant women, Pregnant women, *Listeria* monocytogenes, Foodborne pathogen.

Development Agency: CNPq, CAPES, Fiocruz