Antimicrobial Resistance of foodborne *Listeria monocytogenes* isolated in Colombia

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*Listeria monocytogenes* is an emerging foodborne pathogen with the highest mortality. In Colombia there is no mandatory reporting of their presence in food and the epidemiology of listeriosis remains unknown. Several large outbreaks of listeriosis have been associated with contaminated food such as, vegetables, dairy products as soft cheeses, pasteurized milk and meat products, on which L. monocytogenes can multiply even at low temperatures. The aim of this study was to find the antimicrobial resistance of 62 strains of *Listeria monocytogenes* isolated from meat products (9.8%), dairy products (37.7%), surfaces (32.8) and others (19.7%).

In this study, all strains were resistant to more than 2 antibiotics, evidencing that multiresistant *L. monocytogenes* are circulating in food. Nine strains showed high resistance between 8 and 12 antibiotics, they were resistance to ampicillin, gentamicin, streptomycin and penicillin which are the first choice antibiotics in Colombia to treat *L. monocytogenes* infections. Strains showed higher resistance to nalidixic acid (100%), oxacillin (100%), cefoxitin (98,4%), cefepime (82,3%), streptomycin (22,6%), amikacin (22,6%), kanamicin (17,7%), penicillin (16,1%), eritromicin (12,9%), gentamicin (11,3%). There was no relationship between antibiotic resistance and the origin of the microorganism.

The results of this study evidence that in Colombia are circulating resistant strains of *L. monocytogenes* in food, which may be important in the epidemiology and control of this pathogen in our country and this data, could be of great use in assessing risks studies.