



Occurrence of antibiotic resistant *Enterococcus* spp., isolated from lettuces

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Abstract:

Antibiotypes of *Enterococcus* spp., strains from lettuce of different species and different businesses in Cumaná, Sucre state, were evaluated. From 52 lettuces studied, strains of *Enterococcus* spp., (38%). From a commercial point of view, the lettuces in this study were Batavia, Iceberg, Red Chicory, Escarole and Romana. Scientifically, lettuces belong to two genera, *Lactuca* and *Cichorium*. The most popular lettuce variety was *Lactuca sativa* L. but the most contaminated by enterococci was *Lactuca sativa* var. *capitata* (89%). The places where more lettuces were bought were the Municipal Market and a Mobile Stand in the center of the city. Only two sites sold lettuce not contaminated with enterococci. The clonal dissemination of two strains of *E. faecalis* and one strain of *E. faecium* was demonstrated by antibiotyping, and these clonal strains were isolated from lettuce bought in the municipal market, which suggests that the source of contamination is the same. The susceptibility profile of the *Enterococcus* strains showed that there are strains resistant to glycopeptides, fluoroquinolones, ansamycins, macrolides, phenicols, and tetracyclines. Most of the bacteria found in these lettuces showed resistance to rifampicin, and intermediate to high susceptibility to ciprofloxacin. These results demonstrate that the food chain is a pathway for the dissemination of multi-resistant bacteria to the human intestinal microbiota, turning the gastrointestinal tract into a reservoir of bacteria intractable with available antibiotics.



Biography:

Dr. Lorena Abadía-Patino studied Bioanalysis at the Orient University, Venezuela and graduated in 1997. In 1999, she got a Microbiology Master at Denis Diderot University and her work at Pasteur Institute under the direction of Patrice Courvalin. She got her Ph. D in 2003; returned to Venezuela and joined the research group of Biomedicine department at IIBCAUDO, created the Bacterial Resistance Laboratory. At present, she has the position of an Associated Professor at the UDO. She has published several papers, chapters and books. Associated editor of The Journal of Infection in Developing Countries.

Recent Publications:

1. Silencing of Glycopeptide Resistance in *Enterococcus faecalis* BM4405 by Novobiocin
2. *Enterococcus faecalis* histidine kinase (*vanSE*) gene, complete cds
3. *vanE* Gene Cluster of Vancomycin-Resistant *Enterococcus faecalis* BM4405

3rd World Congress on Antibiotics | June 22-23, 2020 | Zurich, Switzerland

Citation: Abadía-Patiño Lorena; Fluoroquinolone presence in poultry food, breast muscle, and eggs in the Sucre state, and their impact on the intestinal microbiota; Antibiotics 2020; June 22-23, 2020; Zurich, Switzerland.