

Profile of resistance of gram negative bacteria in a private institution in the city of Medellin Colombia

Lina Maria Martinez Sanchez
Universidad Pontificia Bolivariana, Colombia

Introduction: Bacterial resistance is a public health problem globally which has increased during the last decades.

Objective: To determine the mechanisms of resistance in Gram-negative bacteria at a private institution in the city of Medellin.

Materials and Methods: A descriptive study was conducted of cross-section where the population consisted of all of the isolates of bacteria Gram-negative in an institution of the third level of complexity in 2012. Results: We studied 58 strains that were isolated nine microorganisms, being the most frequent *E. coli* (43.1%), *Enterobacter cloacae* (25.9%) and *Serratiamarcescens* (12.4%). The most frequent collection of specimens was urine culture (69.0%) followed by the pharyngeal swab (8.6%). Type AmpC resistance arose in 74% of the isolates. Around 25% of the isolates showed resistance type BLEES and only a 3.4% expressed carbapenemases.

Conclusion: The bacterial resistance of the isolates of the institution profile was similar to that reported in the literature and is consistent with the level of complexity of the institution. It is necessary to establish the mechanisms of resistance of the isolates included to make decisions in the dynamics of hospital epidemiology.

linam.martinez@upb.edu.co