CARACTERIZAÇÃO MOLECULAR DE BACTÉRIAS GRAM-NEGATIVAS ISOLADAS DE INFECÇÕES DE CORRENTE SANGUÍNEA DE ORIGEM HOSPITALAR E COMUNITÁRIA, NA REGIÃO METROPOLITANA DE SALVADOR

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Introduction: Bloodstream Infections are one of the most prevalent infections in hospitals and are associated with high rates of morbidity and mortality. The isolation of multiresistant Gram-negative bacteria in this type of infection is considered to be a propensity in recent years, implying the reduction of the therapeutic arsenal and improving the clinical impact of these diseases. As far as resistence is concerned, the production of Extended Spectrum β-lactamases and carbapenemases enzymes stand out. The hospital environment is recognized as a multiplier of multiresistant bacteria. However the environment plays an important role in the evolution of bacterial resistance, so that knowing and evaluating the profile of the infections acquired in the community is also of great importance. Objectives: To characterize genetically and describe the profile of antimicrobial susceptibility of Gram-negative bacteria causing bloodstream infections as well as from community and hospital origin in the metropolitan region of Salvador, Bahia. Methodology: This is a prospective study in which epidemiological data are collected through medical records review. Bacterial isolates will be identified by MALDI-TOF; the profile of antimicrobial susceptibility will be determined by different phenotypic and genotypic approaches; and molecular characterization will be performed by PFGE and MLST techniques. Results: To the present date, 122 patients have been included in the study, of whom 58.2% (n = 71) were male. The most affected age group was > 60 years, representing 51.6% (n = 63) of all cases. 11 polymicrobial infections were recorded and the total number of recovered bacteria was 141. The most frequently isolated bacteria were E. coli, with 31.2% (n = 44), and K. pneumoniae with 28.4% (n = 40). The positive ESBL phenotype was observed among 29 enterobacteria. Fourteen isolates showed resistance to at least one carbapenem; among these, 5 were enterobacteriaceae and all of them were positive in Hodge test for carbapenemase detection. Conclusions: The knowledge of the susceptibility profile of the bacterial isolates that causes bloodstream infections, and understanding of the epidemiological aspects related to the spread of microbial resistance are essential to support the development of intervention measures in public health.

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