

Title: PREVALENCE OF ENTEROBACTERIACEAE PRODUCERS OF KLEBSIELLA PNEUMONIAE CARBAPENEMASE IN EPIDEMIOLOGICAL SURVEILLANCE CROPS IN PATIENTS OF INTENSIVE CARE UNITS OF A TEACHING HOSPITAL OF MINAS GERAIS

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Abstract:

The increasing number of multi-resistant bacteria in the hospital environment and the lack of therapeutic options in the short and medium term has become a major challenge for the control of infections related to health care. Infection by Enterobacteriaceae producing Klebsiella pneumoniae carbapenemase (KPC), has emerged as the biggest risk for debilitated patients hospitalized in Intensive Care Units (UTI's). The aim of the study was to identify the prevalence of producing KPC in epidemiological surveillance cultures Enterobacteriaceae samples of rectal swab of interned patients in UTI's adult, pediatric and neonatal of a Hospital of Minas Gerais Education in the period January-July 2014. We conducted a retrospective descriptive cross-sectional study which analyzed the results of rectal swab cultures collected weekly from hospitalized patients registered in the register of the hospital's microbiology laboratory. This study was approved by the Research Ethics Committee opinion of the number 948 342. 422 samples of rectal swab were analyzed, being 367 (86.9%) from the adult ICU and 55 (13%) of neonatal and pediatric ICU, were positive for KPC 31 (7.3%) of which 21 (5.7 %) were the adult ICU and 10 (18.1%) of neonatal and pediatric ICU. Of the 31 strains KPC, 1 (3.2%) was Escherichia coli, 4 (12.9%) of Enterobacter sp and 26 (83.9%) of Klebsiella pneumoniae. The KPC survey was conducted by phenotypic test with phenyl boronic acid, EDTA and cloxacillin and later strains were sent to the reference laboratory for research blaKPC gene. The prevalence of these microorganisms in UTI's is worrying because the treatment options available and effective measures to reduce the number of cases of infection / colonization has decreased more and more. Laboratory detection of KPC-producing Enterobacteriaceae expresses the importance of epidemiological surveillance cultures routinely as a preventive measure and control the spread of these multiresistant microorganisms mainly in UTI's.

Keywords: *Enterobacteriaceae*, KPC, Colonization.