

TITLE: MONITORING OF KPC-PRODUCING *Klebsiella pneumoniae* IN A HOSPITAL IN MIDWEST REGION OF SÃO PAULO STATE.

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Background: The presence of multidrug-resistant microorganisms in the hospital environment has become a major public health problem due to the presence of current and persistent clones. **Objectives:** Thus, the objective of this study is to describe the circulation of KPC-producing *Klebsiella pneumoniae* in a hospital of high complexity in a city located in midwest region of São Paulo State. **Material and Methods:** During the months of July and August 2015, ten isolates of *K. pneumoniae* resistant to carbapenems obtained from surveillance swabs, tracheal secretions and urine, from different patients, were sent to the Adolfo Lutz Institute (IAL) of Marília City to confirm the identification and resistance to antimicrobial agents by disk diffusion technique. The isolates resistant to carbapenems were submitted to the test with beta-lactamases inhibitors recommended by NT 01/2013 of ANVISA, and sent to the IAL São Paulo to confirm the presence of *bla*_{KPC} by PCR and to carry-out PFGE (genomic DNA digested with XbaI) to define the circulation of these microorganisms. **Results:** All isolates were resistant to aztreonam, cefepime, cefotaxime, cefpodoxime, ceftazidime, ciprofloxacin, ertapenem, meropenem, piperacillin-tazobactam, trimethoprim-sulfamethoxazole and ticarcillin-clavulanate. Two isolates were susceptible to imipenem and tetracycline, four isolates were susceptible to tobramycin and gentamicin, and only one isolate showed resistance to amikacin. PCR confirmed the presence of *bla*_{KPC} genes in six isolates. PFGE showed four different profiles: profile A with four isolates with 100% of similarity, three KPC producers and one non-KPC; profile B with only two isolates non-KPC producers; profile C with two isolates KPC producers and profile D with two isolates, one KPC producer and another one non-KPC. **Discussion and conclusion:** With the confirmation of the presence of KPC-producing *K. pneumoniae* in the hospital, control measures were taken by health workers in order to reduce transmission among patients.

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Key words: carbapenemase; nosocomial infection; *Klebsiella pneumoniae*; KPC; nosocomial outbreak.