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First Report of KPC-Producing *Pseudomonas aeruginosa* in Brazil

The first report of KPC-producing *Pseudomonas aeruginosa* isolates was from Colombia (KPC-2) in 2007, followed by reports from Puerto Rico (KPC), Trinidad and Tobago (KPC-2), the United States (KPC-2), and China (KPC-2) (1, 6–10). This report describes the first detection of KPC-2-producing *P. aeruginosa* strains in Brazil. In February 2010, two carbapenem-resistant *P. aeruginosa* strains were recovered in two consecutive weeks from tracheal secretions of two distinct patients in an intensive care unit (ICU) of a tertiary hospital located in Recife, Pernambuco, Brazil. In both patients, a combined therapy of gentamicin and meropenem was used. Susceptibility to antimicrobial agents was tested by the disk diffusion method according to the CLSI criteria of 2010 (2). The presence of bla_{KPC}, bla_{SPM-1}, and bla_{IMP} was determined by PCR and DNA sequencing using specific primers (3, 5, 11). Molecular typing of the isolates was performed by enterobacterial repetitive intergenic consensus-based PCR (ERIC-PCR) (4). Both isolates were characterized as multidrug resistant (MDR), showing resistance to amikacin, ciprofloxacin, ticarcillin-clavulanate, aztreonam, cephems, ceftazidime, imipenem, and meropenem. They were susceptible only to gentamicin and polymyxin B. ERIC-PCR revealed that the two isolates showed the same molecular profile. The bla_{SPM-1} and bla_{IMP} carbapenemase genes were not present; however, the bla_{KPC} gene was detected in both isolates, amplifying a fragment of approximately 1,000 bp. The entire coding sequences of the two bla_{KPC} genes were subsequently sequenced, and the analysis of the nucleotide sequences and deduced protein sequences with BLAST (http://blast.ncbi.nlm.nih.gov/Blast.cgi) and Clustal W (http://www.ebi.ac.uk/) showed that the two isolates harbored bla_{KPC-2}. The analysis of antimicrobial agents found in this study revealed susceptibility only to gentamicin and polymyxin B, while Villegas et al. (9) and Poirel et al. (7) identified KPC-producing *P. aeruginosa* isolates involved in outbreaks occurred in Colombia and the United States, respectively, that were susceptible only to amikacin and colistin. On the other hand, Akpaka et al. (1) identified a panresistant KPC-producing *P. aeruginosa* isolate in Trinidad and Tobago. The identification of multidrug-resistant clones of KPC-producing *P. aeruginosa* in hospitalized patients in several countries during the same period suggests the need for surveillance of these strains for infection control measures. The data presented herein confirm that *P. aeruginosa* strains harboring bla_{KPC} are disseminated in the Americas.

Nucleotide sequence accession numbers. The bla_{KPC} nucleotide sequences were deposited in GenBank under accession numbers JN255797 and JN255798.

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