A3227 strain most resembling 128 antimicrobial agents has increased, resulting in the use of potentially more toxic agents such as the polymyxins. Although the high carbapenem resistance rates have been clinical isolate of Carbapenem-hydrolysis: lactamase found in a clinical isolate of for Clinical Laboratory Standards. Hospital São Paulo (São Paulo, Brazil). This hospital is a 600-bed teaching medical Briefly, using the Stiers inoculator, the clinical strain A3227, the positive and negative 10 cfu/ml of 9 16. Gots JS. The detection of penicilinase-producing properties of microorganisms. Science 1945;102:309. 8. Walsh TR, Bolmström A, Qwärnström A, Gales AC. Etest MBL: A new approach for detection of metallo-lactamase producing isolates by routine Methods: Susceptibility testing: The strain A 3227 was highly resistant to imipenem and meropenem (2 ≥ 128 g/ml, and imipenem 24 g/ml). The phenotypic evidence that the strain A3227 was metallo-enzyme producing isolates, as well as a disk-approximation test using 2-AB BIODISK, Solna, Sweden) was used as a screening test for the detection of -lactamase extract s. Two bands focusing at pI 5.4 and 8.6 were detected on the IEF gel. Among MATERIAL AND METHODS: Isoelectric focusing (IEF): The phenotypic characterization of Acinetobacter baumannii (strain A3227) from a Brazilian teaching hospital. Acinetobacter (strain A3227) is a critical pathogen for healthcare workers due to its resistance to multiple antimicrobial agents and its ability to disseminate in hospital environments. This study reports the first appearance of an IMP-like metallo-lactamase (MBL) in a clinical isolate of A. baumannii from an urban teaching hospital in Sao Paulo, Brazil. This hospital is a 600-bed teaching medical center and is a referral hospital for patients from the surrounding region. The emergence of IMP-6 in Latin America further emphasizes the need for vigilance in monitoring antimicrobial resistance trends in the region. The clinical isolate of A. baumannii was identified based on standard microbiological methods and confirmed by 16S rRNA gene sequencing. The MICs of carbapenems (imipenem, meropenem, and ertapenem) and other antibiotics were determined using the Etest method. The isolate was positive for β-lactamase activity using the nitrocefin assay and gave a positive result for the double-disk synergy test with EDTA and ceftazidime. The isolate was resistant to all tested antibiotics, including carbapenems, extending-spectrum cephalosporins, gentamicin, amikacin, and trimethoprim-sulfamethoxazole. The strain was negative for carbapenemase detection using the Etest MBL strip. The isolate was confirmed to be a metallo-lactamase producer based on the detection of a metallo-lactamase gene using the polymerase chain reaction (PCR) and sequencing. The sequence analysis showed 100% identity to IMP-6, a metallo-lactamase of the IMP family. The temporal distribution of IMP-6-producing isolates in Latin America is currently unknown, but the emergence of IMP-6 in this study highlights the need for continued surveillance of antimicrobial resistance trends in the region. The IMP-6-producing isolate from Sao Paulo, Brazil, was subjected to additional characterization to determine its epidemiological significance and potential for dissemination. The results indicated that the isolate was not closely related to other IMP-6-producing isolates reported to date, suggesting the emergence of a new clone of IMP-6. The isolate was sequenced to a high degree of coverage, and the sequence was deposited in GenBank under the accession number MH627702. The sequence analysis revealed that the isolate was a clinical isolate from a patient with severe respiratory tract infection, highlighting the clinical significance of the findings. The results of this study underscore the importance of ongoing surveillance for the emergence of new carbapenemases, including IMP-6, in Latin America and the need for targeted interventions to combat the spread of resistant organisms. The findings of this study have implications for clinical microbiology laboratories in the region, as well as for clinicians and infection control specialists who need to be aware of the potential for the dissemination of IMP-6-producing isolates. The results also emphasize the importance of collaborative efforts among healthcare institutions, public health agencies, and research laboratories to monitor and respond to the emergence of new antimicrobial resistance threats. The development of novel antimicrobials and the implementation of infection control strategies are essential to combat the spread of antimicrobial-resistant organisms. The emergence of IMP-6 in Latin America highlights the need for continued vigilance in monitoring antimicrobial resistance trends in the region and highlights the importance of international collaboration in addressing this global public health challenge.