KPC Detection in Clinical Isolates of *Klebsiella pneumoniae* from Porto Alegre-RS

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Bacterial resistance is an emerging problem that limits the therapeutic options, difficult the treatment and promoting relapse. Between the resistance mechanisms, emphasizes the beta-lactamases production, such as KPC carbapenemases, which has a high potential for spread due to its plasmid localization. Our objective were to detect clinical isolates of *K. pneumoniae* KPC producing. 17 samples of *K. pneumoniae* with reduced susceptibility to carbapenems were analysed. They were submitted to phenotypic detection of ESBL, carbapenemases and KPC and to the blaKPC gen investigation by the Polimerase Chain Reaction (PCR). A strain of *K. pneumonia* producing KPC was used as control. Among the isolates, there was an incidence of 17 ESBL, 10 carbapenemases production an 2 phenotypically positives for the KPC production. After agarose gel electrophoresis, a band of 795pb can be viewed in the control strain, corresponding to the blaKPC gene, however, this was not detected in the samples analysed. None of the samples was identified as blaKPC gene carrier, including the positive ones in the phenotypic analysis, what can be justified by a supposed concomitant presence of ESBL and Amp C, which can lead to false-positive for KPC presence, or by other resistance mechanism. It should be emphasized as well the need for molecular analysis to a better characterize of these enzymes and their resistance mechanism. The production of KPC is an emerging mechanism that needed their constant vigilance. It’s important to confirm a positive KPC clone, in order to implement control measures and proper isolation.

**Key words**: bacterial resistance, *K. pneumoniae*, carbapenemase, KPC