

Prevalence of *Klebsiella Pneumoniae* in Panje Azar Hospital of Gorgan, Iran, 2011

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Abstract

Background and Objective: *Klebsiella pneumoniae* is one of the agents causing nosocomial infection; therefore, we decided to report the prevalence of *Klebsiella pneumoniae* caused infection.

Material and methods: The frequency of *Klebsiella* in culture media samples of Panje Azar hospital was studied in 2011-2012. After determination of the species with biochemical methods and determination of resistance to third generation cephalosporins, the existence of responsible genes for this resistance was investigated using specific primers. The PCR product for *CTX-M* gene was sequenced.

Results: During the study, 70 isolates of *Klebsiella* were isolated in that 51 (72.8%) related to three months of November, December and January. Except for the one related to November, other ESBL cases belonged to these three months. Based on molecular investigation of ESBL genes, these isolates at least were in 3 types and had a high frequency in Internal, female and Emergency wards.

Conclusion: The present report implied a sudden prevalence of *Klebsiella pneumoniae* that detected and controlled by a correct monitoring.

Keyword: *Klebsiella Pneumoniae*, ESBL, CTX-M