Abstract

Resistance to antibiotic is important problem to treat of patient. There has a dramatic increase in the number of organisms that produce extended-spectrum beta-lactamases. CTX-M-type enzymes constitute a distinct lineage of molecular class a beta-lactamases, and are a rapidly growing group. These beta-lactamases consist of four groups. This class of beta-lactamases has been recognized worldwide as an important mechanism of resistance to oxyiminocephalosprins used by gram-negative pathogens. In this analytical-descriptive study, antibacterial susceptibility patterns of 70 *Kelbsiella* to Cefotaxim, Ceftazidim and Ceftriaxon tested using disk diffusion method. In addition，cofirmatory tests for detecting ESBLs phenotypes were performed using Ceftazidim-clavulanic acid combination disk. The PCR assay was used for detection of CTX-M genes. From 70 clinical isolates 70 isolates were positive for ESBL in initial screeing tests and from them 66 isolates were positive in phenotypic confirmatory tests. 66 isolates potentially producing extended-spectrum-beta-lactamases were used for the presence of CTX-M genes by molecular assay. From 70 clinical 46.62% were positive for bla group I genes, 5.38 % was positive for bla group II genes.

Key words: Klebsiella pneumonie, extended-spectrum beta-lactamases, CTX-M genes, PCR.

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Title:

Determination of presence of CTX-M genes in of Klebseilla pneumonia strains isolated from hospitals in zabol.

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