Frequency of Multi-Drug Resistance (MDR) in Gram Negative Bacteria from Urinary Infection in Gorgan, 2011-12

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Abstract

Background and objective: The periodic evaluation of antimicrobial activity of different antibiotic is essential because antibiotic sensitivity pattern may also changed during short courses. The aim of this study was to assess the frequency of Multi-drug Resistance (MDR) in Gram negative uropathogens.

Material and Methods: This study was conducted on 111 gram negative uropathogens using standard microbiology methods in Gorgan, 2011-2012. Antibiotic susceptibility was investigated by Kirby-Bauer disk diffusion methods (DDM).

Results: the most common isolates were klebsiella (40.5%), Enterobacter (26.1%), pseudomonas (13.5%), proteus(6.3%), acinetobacter (1.8%) and other gram negative bacteria (18.3%). The highest antibiotic resistance was seen to clindamycin (99.1%), and the most sensitivity to Carbapenems (94.6%). Multi drug resistant was seen in 68.5% of isolates. In inpatients, all of the citrobacter species had resistant to multi drugs simultaneously.

Conclusion: a high frequency of multi drug resistant in uropathogens is observed in both inpatients and outpatients.

Keywords: Multi Drug Resistant, Gram Negative Bacteria, Urinary Tract Infection