

## عنوان مقاله:

Comparison of Multiple Antibiotic Resistance Patterns of Klebsiella Bacteria Groups Causing Urinary Infections and Determination of Imipenem MIC in MDR Strains

## محل انتشار:

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## خلاصه مقاله:

**Background and Objective:** Occurance of severe diseases by bacteria that are considered as normal flora poses a threat to human life. Bacteria such as Klebsiella, Enterobacter, and Serratia, which are all VP +, cause the urinary tract infection. The antibiotic-resistant strains of these bacteria create problems in the process of treatment. The aim of this research was to compare the multiple antibiotic resistance patterns of Klebsiella, Enterobacter, and Serratia causing urinary infections and determine the imipenem MIC in MDR strains. **Materials and Methods:** In this experimental study ۴۰۰ urinary specimens from UTI patients who had referred to Imam Khomeini Hospital (Tehran) were collected using the midstream clean catch method. The klebsiella groups were identified by conventional methods. The antibiotic sensivity test was carried out by disk diffusion and macrodilution broth test methods. **Results:** Of ۴۰۰ patients with urinary tract infections, ۹۶ (۲۴%) were caused by Klebsiella groups (KES. Maximum and minimum resistances were to amoxicillin and amikacin, respectively. MIC and MBC determined using serial dilution method and showed that the concentration range of imipenem that stopped growth of Klebsiella pneumoniae and Serratia marcescens were in the range of ۰.۲۵- ۱۶ and ۸-۰.۲۵ µg / ml, respectively. **Conclusion:** The results of this study suggest that imipenem is an appropriate medication for the treatment of Klebsiella group infections.

## کلمات کلیدی:

Keywords: Klebsiella, Antibiotic resistance, Minimum inhibitory concentration, Urinary tract infections, Imipenem

## لینک ثابت مقاله در پایگاه سیویلیکا:

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