Determine Extent of Antibiotic Resistance of Separated Acinetobacter Baumannii Isolated of Tehran Hospital on Antibiogram and MIC Methods

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Background & Objectives: Acinetobacter type is one of pathogen and important factor in hospital infections. These bacteria have ability of gene transfer between its types and other bacteria as caused for resistance against antibiotics and resistance scattering of bacteria. The goal of research is determine extent of resistance for antibiotics and minimum extent of MIC concentration and separated Acinetobacter baumannii isolates in Tehran Hospital.

Methods: 176 clinical samples were collected within 6 months from Tehran hospitals under the title of *Acinetobacter baumannii*. Then antibiogram test was performed with Muller Hinton Agar culture environment and performed 10 antibiotic disc made by Rosco Denmark Company and MIC Test carried out for Imipenem antibiotic on samples.

Results: Test results reported as per CLSI table: Resistance to imipenem 97.15% ; Ceftazidime 97.15%; Piperacillin+Tazobactam96.59%, Ticarcillin+Clavolonat85.22%, Ciprofloxacin96.02% Trimethoprim+Sulfamethoxazol 98/29%; Cefotaxime+Clavolonat 96/59%, Levofloxacin 93/75%, Ceftazidime+Clavlonat 96.59% and Cefotaxime 97.72%. MIC imipenem test shows that among all samples, 72.72% of factors have 16 ≥ MIC and 176 factors have positive MBL among resistance factors.

Conclusion: As per results, it is obvious for increase percentage of antibiotic resistance of *Acinetobacter baumannii* and we should forbid use and consumption of antibiotic without physician prescription.

Keywords: *Acintobacteria baumannii*; Hospital Infection; Antibiotic Resistance