

Antimicrobial Resistance Profile of *Pseudomonas Aeruginosa* Strains**Shafiee, F. (MSc)**

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**Abstract**

**Background and Objectives:** *Pseudomonas aeruginosa* is the most common organism, which is separated from the burn infections. Due to increased antibiotic resistance, there are many problems to deal with the infections caused by *Pseudomonas aeruginosa*. This study aimed to determine the resistance to antibiotics against clinical isolates of *Pseudomonas* using phenotype methods

**Material and Methods:** 100 strains of *Pseudomonas aeruginosa* were collected from the burn patients in Taleghani hospital in Ahvaz, Iran, during a six-month period. After *phenotypically* initial identification, antibiotic sensitivity of isolated strains to conventional antibiotics against *Pseudomonas aeruginosa* was determined using a disk *diffusion* technique, and Phenotypic screening for MBLs production was performed .

**Results:** the maximum percentage was related to wound infection and the frequencies of the resistance to imipenem, meropenem, piperacillin, piperacillin-tazobactam, ceftazidime, gentamicin, amikacin, and ciprofloxacin, doripenem, ertapenem and colistin sulphate, were 70%, 53%, 83%, 67%, 91%, 88%, 84%, 84%, 33%, 90%, and 0%, respectively. The use of CD Test methods was approved for determining resistance to Carbapenems.

**Conclusion:** antibiotic resistance to *Pseudomonas aeruginosa* is *increasing and* colistin sulphate is the most effective antibiotic.

**Keywords:** *Pseudomonas Aeruginosa*; Burn Infection; Antibiotic Resistance