

Study the pattern of antibiotic resistance and risk factors related to Acinetobacter isolated from different patients in Imam Khomeini hospital of Ardabil city during 2011-2015.

Background: Resistance patterns among nosocomial bacterial pathogens in hospitals may vary widely from country to country at any given point and within the same country over time. Acinetobacter is one of the most important bacteria that cause hospital-acquired infections. Therefore, surveillance of the antibiotic resistance of Acinetobacter is necessary. This study aims to investigate the resistance patterns of isolated Acinetobacter from patients in Imam Khomeini hospital.

Materials and Methods: This cross-sectional-descriptive study was performed on 108 isolates of acinetobacter isolated from patients in Imam Khomeini Hospital during 2011 to 2015 in Ardabil. We determined their susceptibility to the following antibiotics via the antibiogram method (disk diffusion): ceftazidime; polymyxin B; meropenem; tobramycin; imipenem; trimethoprim sulphamethoxazole; ampicillin-sulbactam; aztreonam; rifampicin; ceftazidim; gentamycin; cefotaxim; piperacillin; ciprofloxacinamikacin; cefepime; tetracycline; amoxiclav; cefixime; ceftizoxime; nitrofurantoin; cloramfenicol; furazolidone; cefalotin; amoxicillin; cefalexin and ticarcillin. Also questionnaire which contains information about the sex, age, ward and sampling organ, length of stay and mortality rate were collected from reviewing the files of patients.

Results: Of 108 cases studied in this research, 53.7% were male and 46.3% were female. The average age of subjects and average days of hospitalization were 60.41 ± 10.01 and 28.01 ± 1.97 respectively. ICU with 74.1% of the sample had the most sampled and internal and infectious wards were next in rank. largest number of isolates was related to lung biopsy(66.7%). High antimicrobial resistance (100%) in Acinetobacter was observed in piperacillin; ceftizoxime; nitrofurantoin; cloramfenicol; furazolidone; cefalotin; amoxicillin; cefalexin and ticarcillin. Antibiotic resistance to ceftazidime , imipenem, trimethoprim-sulfamethoxazole, ceftriaxone, cefotaxime and cefixime was also above 80%. The least antibiotic resistance respectively was to polymyxin B, ampicillin / sulbactam and meropenem.

Conclusion: The results showed that the majority of isolates were resistant to imipenem and Ceftriaxone. Therefore, the high rate of resistance to these drugs is worrying and highlights the limited treatment options .

Key words: Bronchial anthracosis, Pulmonary tuberculosis, Bronchoscopy