Antibiotic Sensitivity Patterns of the Most Common Bacteria Isolated from Al-Mouwasat University Hospitalin 2015,Syria

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Abstract: Bacterial resistance to antibiotics has become a growing threat facing health care professionals when treating infectious diseases. Therefore, it was important to study the bacterial sensitivity patterns, their periodic and geographic changes.

The current study included the antibiotic sensitivity patterns of the most common bacteria isolated from patients in Al-Mouwasat University Hospital during the period between January and October 2015.A total number of457 isolates of Escherichia coli, Staphylococcus aureus, and Pseudomonas aeruginosa were obtained from various clinical specimens and were confirmed by standard bacteriological procedures. Thereafter, antibiotic sensitivity patterns were defined by disc diffusion method.

Escherichia coli isolates showed high rates of sensitivity to Tigecycline(93%) ,Colisten(89%), Imipenem(86%),and Meropenem (79%). Whereas, Vancomycin, Meropenem, and Linezolid demonstrated maximum sensitivity against Staphylococcus aureus(98%), (91%), and (91%), respectively. Regarding Pseudomonas aeruginosa, the isolates were maximally sensitive to Imipenem (85%) and Colisten (73%).

Comparison of the results with local and international studies demonstrated a decline in sensitivity to most antibiotics in the current study, with the exception of Pseudomonas aeruginosa isolated from otic infections, which showed an increase to some antibiotics when compared to a study from Alqamishli, Syria.

In conclusion, periodic antimicrobial susceptibility studies should be regularly performed to detect the resistance trends of bacteria, and to modify the selection of antibiotics used in sensitivity tests according to their results.

Key wards: Antibiotic sensitivity, Escherichia coli, Staphylococcus aureus, Pseudomonas aeruginosa.

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