



Nosocomial infectious prevalence study in Al-Yarmouk hospital

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Abstract : Nosocomial infections are those infections acquired as a result of treatment in a hospital or health care service providing center. These infections usually appear 48 hours or more after hospital admission or within 30 days after discharge. In this study, a total of 730 samples including (90 swabs from patient and 640 environmental swabs sample) were collected from AL-Yarmouk hospital Educational in Baghdad from the period between June and August 2016. By morphological and biochemical reactions, *Acinetobacter boumanii*, *Escherichia coli*, *Enterobacter*, *Klebsiella pneumonia*, *Proteus mirabilis*, *Proteus Vulgaris*, *Pseudomonas aeruginosa*, *Serratia fiacria*, *Staph. aureus*, *Strep. Pneumonia*, *Strep. Pyogens* and *Fungus* were isolated, identified and tested for their antibiotic sensitivities using agar disc diffusion assay against (Amikacin, Cefixime, Ceftriaxone, Chloramphenicol, Ciprofloxacin, Clindamycin, Gentamycin, Imipenem, Tetracycline and Ticarcillin). The antimicrobial susceptibility was performed that all microorganisms were sensitive to Imipenem and resist to Ticarcillin. *P. aeruginosa* was more resistant to all used antibiotic except Ciprofloxacin, while *E. coli* was more Sensitive to all used antibiotic except Ticarcillin.

The clinical specimens showed that *P. aeruginosa* was the commonest isolate (9 and 3 isolates in Ear and wound swabs respectively 12 (24.49 %) followed by *E. coli* (2 and 6 isolates in Ear and wound swabs respectively 8 (16.33 %) and *Staph. aureus* (3, 3 and 2 in Ear, Nasal and wound swabs respectively 8 (16.33 %) with significant differences ($P \leq 0.05$). While the environment isolates showed that the general operation room was the highest contamination with microorganisms followed by Burn unit and urological operation room with significant differences ($P \leq 0.05$). *Staph. aureus*, *E. coli* and *P. aeruginosa* were the commonest isolate reached to 50 (26.74 %), 45 (24.06 %) and 32 (17.11 %) respectively.

Key words : Nosocomial infections, antibiotic resistance, pathogenic microorganisms.