

Parallel among Urinary Tract Infection in Diabetic and Non-Diabetic Patients: A Case Study

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Abstract : This study detects the bacterial species that responsible for UTI in both diabetic patients and non-diabetic patients, Jordan. 116 urine samples were investigated in order to determine UTI-causing bacteria. These samples distributed unequally between diabetic male (12) and diabetic female (25) and also non-diabetic male (13) and non-diabetic female (66). The results represent that E.coli is responsible for UTI in both diabetic and non-diabetic patients (15.5% and 29.3% respectively) with large proportion (44.8%). This study showed that not all bacterial species that isolated from the non-diabetic sample could be isolated from diabetic samples. E. coli (15.5%), P. aeruginosa (4.3%), K. pneumonia (1.7%), P. mirabilis (2.6%), S. marcescens (0.9%), S. aureus (1.7%), S. pyogenes (1.7%), E. faecalis (0.9%), S. epidermidis (1.7%) and S. saprophyticus (0.9%). But E. aerogenes, E. cloacae, C. freundii, A. baumannii and B. subtilis are five bacterial species that can't isolate from all diabetic samples. This study shows that for the treatment of UTI in both diabetic and non-diabetic patients, Chloramphenicol (30 µg), Ciprofloxacin (5 µg) and Vancomycin (30 µg) are more favorable than other antibiotics. In the same time, Cephalothin (30µg) is not recommended.

Keywords : urinary tract infections, diabetes mellitus, bacterial species, infections

Conference Title : ICBHES 2017 : International Conference on Biological, Health and Environmental Sciences

Conference Location : London, United Kingdom

Conference Dates : January 19-20, 2017