Antibiotic Appropriateness for Urinary Tract Infection in the Emergency Room

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Background: Urinary Tract Infections (UTI) are a common cause of emergency room (ER) visits and antibiotic misuse.

Objective: To evaluate the characteristics of UTI attending ER and to assess antibiotic prescription and inappropriate treatment implications.

Design: A Prospective Study.

Setting: Salmaniya Medical Complex, Bahrain.

Methods: Patients aged more than 14 years who presented to the ER with UTI from 1 July 2014 to 31 July 2014 were reviewed. Data was obtained from patients' emergency records and classified according to the type of UTI as complicated, uncomplicated or UTI in pregnancy. Antibiotic treatment was considered appropriate if it followed the Local or International Guidelines.

Results: A total of 239 patients were included in the study; 83 (34.7%) were males, 75 (31.4%) were pregnant females and 81 (33.9%) were non-pregnant females, the mean age was 37.56 years. One hundred forty-five (60.7%) patients had complicated UTI. The most prescribed antibiotics were cefuroxime and ciprofloxacin. Seventy-two (30.1%) of inappropriate antibiotics prescription were mostly due to improper duration.

Inappropriate antibiotic treatment was significantly more common among males, 43 (17.9%) P-value <0.001; complicated UTI were 63 (26.4%), P-value <0.001. One hundred thirty-three (55.6%) prescriptions were written by emergency doctors, P-value <0.001. There was no significance among the different age groups.

Conclusion: High rate of inappropriate antibiotics use in UTI patients mostly in complicated UTI and in patients treated by emergency doctors physicians.

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