

3rd World Congress and Exhibition on

ANTIBIOTICS AND ANTIBIOTIC RESISTANCE

July 31-August 01, 2017 | Milan, Italy

Bacterial pathogen responsible for urinary tract infection in patient attending to general OPD of B P Koirala Institute of Health Sciences, Dharan

Tula Krishna Gupta, Bijendra Kumar Rai, Ratna Baral and Ajay Kumar Yadav
B P Koirala Institute of Health Sciences, Nepal

Introduction: Recently, UTI became more complicated and difficult to treat because of appearance of pathogen with increasing resistance to antimicrobial agents. It is useful to obtain the local sensitivity pattern in the hospital setting so as to guide empirical prescribing.

Methods: This is a prospective hospital based study to identify the organisms causing UTI and their antibiotic susceptibility. A total of 400 urine samples were collected from the patient attending general OPD of BPKIHS, Dharan, Nepal. Consecutive patients presenting with symptoms of UTI had their clean catch midstream urine analyzed. Quantitative urine culture was performed by using calibrated loop direct streaking method of 4 mm diameter nichrome loop delivering 0.001 ml of uncentrifused urine specimen which was inoculated onto cysteine lactose deoxycolate agar medium and incubated at 37 degree centigrade for 24 hours.

Results: Out of 400 patients, 163 (40.7%) showed bacterial growth. *Escherichia coli* was most common (68.7%), followed by *Klebsiella spp.* (7.4%). There was a female dominance of 2.79:1 compared to males. Infections were most common in young adults (20-29 years). The most effective antibiotic was Nitrofurantoin (89.7%).

Conclusion: The most common causative organism for UTI was *Escherichia coli*, and the best first line antibiotic was Nitrofurantoin. This study provides useful information for health practitioners of all levels in the eastern region of Nepal. As the data was collected in the general outpatient department it represents mostly community acquired, rather than hospital acquired urinary infection and may be used as an aid to choice of antibiotic in the community setting.

Biography

Tula Krishna Gupta has completed his MD in General Practice and Emergency Medicine from B P Koirala Institute of Health Sciences, Dharan in 2016 September. He is a Senior Resident in General Practice and Emergency Medicine Department of B P Koirala Institute of Health Sciences, Dharan, Nepal.

guptatk@hotmail.com

Notes: