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**Original article
Multidrug resistant uropathogens: Some scope today, no hope tomorrow!!!**
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**Abstract:**

**Introduction:**  Multidrug resistant urinary pathogens are on a rise in the hospitals posing a tough challenge to the physicians at large. As they are resistant to most of the drugs available in the hospital, empirical treatment protocols have been rendered almost ineffective. Antibiotic susceptibility testing of urinary isolates helps to choose appropriate antibiotics and monitor epidemiological trends. The aim of the present study was to determine the prevalence of various urinary pathogens in a tertiary care hospital, determine their susceptibility patterns and to suggest possible treatment options in the context of present scenario.

**Methods:** This study was conducted in the Department of Microbiology of a super specialty hospital in New Delhi. Study design was retrospective. Eight hundred and five uropathogens isolated from 3,931 urine samples cultured over a period of one year (October 2014 - October 2015) were included in the study. The samples had been received from both in-patients and out-patients of the hospital. All these isolates had been identified by appropriate biochemical tests and Antibiotic susceptibility testing was performed by Kirby Bauer method as per the CLSI guidelines.

**Observations and results:** Eight hundred and five (805) urinary pathogens had been isolated in significant counts (>105cfu/ml) from 3930 urine samples cultured. The most prevalent isolate was Escherichia coli (34.16%) followed by Klebsiella spp. (18.76%) and Enterococcus spp. (15.40%). Other bacterial isolates were Proteus spp. (8.20%), Pseudomonas aeruginosa (7.95%), Staphylococcus aureus (3.98%), Acinetobacter spp. (3.11%), Morganella spp. (2.61%), Citrobacter spp. (2.48%), CoNS (1.99%) and Enterobacter spp. (1.37%). Majority of these isolates were Multidrug resistant. Eighty to Ninety percent of the gram negative bacteria viz E.coli, Enterobacter spp., Proteus spp., Pseudomonas spp. and Citrobacter spp. were susceptible to Imipenem. 72-96% of E.coli, Enterobacter spp. and Pseudomonas spp. were sensitive to Nitrofurantoin and Piperacillin-Tazobactam. All the gram positive cocci, S. aureus, CoNS and Enterococcus spp. were sensitive to Teicoplanin and Linezolid.

**Conclusion:** In view of high degree of MDRs amongst the uropathogens, clinicians are left with very few therapeutic options. Judicious use of reserve wonder drugs, strengthening the infection control program and implementation of a proper antibiotic policy are our only saviours.

**Keywords:** Multidrug resistance, uropathogens