

Antibiotic susceptibility pattern of urinary isolates from a tertiary care hospital with special reference to Gram negative bacteria

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Abstract: Urinary tract infections are amongst the most common infections encountered in clinical practice. Antimicrobial resistance is very high among the urinary pathogens. Hence we aimed at evaluating the pathogens causing UTI in the study area and study the antibiogram. Materials and methods: Ninety eight urine specimens from symptomatic patients were processed for isolation of pathogen and antibiotic sensitivity. The antibiogram to different antibiotics were studied. Inpatient and outpatient groups were compared for antibiotic resistance and results compared. Results: Of 98 specimens 50 specimens didn't yield any pathogen. Of the 48 which grew, 40 were gram negative bacteria and 9 were Gram positive bacteria. Escherichia coli was predominant pathogen (65%). High drug resistance was noted to ampicillin (93%), Nalidixic acid (75%), Cotrimoxazole (73%), Norfloxacin (68%) and even third generation cephalosporins. Nitrofurantoin showed least resistance (15%). Drug resistance was high in inpatients than outpatients. Conclusion: E.coli were the predominant pathogens causing UTI followed by Klebsiella species. Antibiotic resistance was very high in the study hospital. Nitrofurantoin still holds good for the treatment of UTIs. Drug resistance was high in inpatients compared to outpatients. The situation warrants judicious use of antibiotics to curb the menace of antibiotic resistance.

Keywords: Antibiogram, antibiotic resistance, inpatients, nitrofurantoin, urinary tract infection
