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Letter to Editor

MICROBIOLOGICAL PROFILE AND ANTIBIOTIC RESISTANCE PATTERN OF URINARY TRACT INFECTION IN A TERTIARY CARE HOSPITAL

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As urinary tract infections are the main commonly occurring ailment in nephrology outpatient department, it's necessary to have an outline on the resistance pattern of various antibiotics towards the commonly occurring microbes to establish safe and effective treatment. The frequently occurring pathogen causing community acquired urinary tract infections are E. coli, Klebsiella, Citrobacter and Streptococci. Poor medication adherence and indiscriminate usage of antibiotics may be the core reasons for development of resistance among these pathogens. A retrospective study was conducted in all culture proven UTI cases of GIMCARE Hospital, Kannur from February 2020 to May2020.

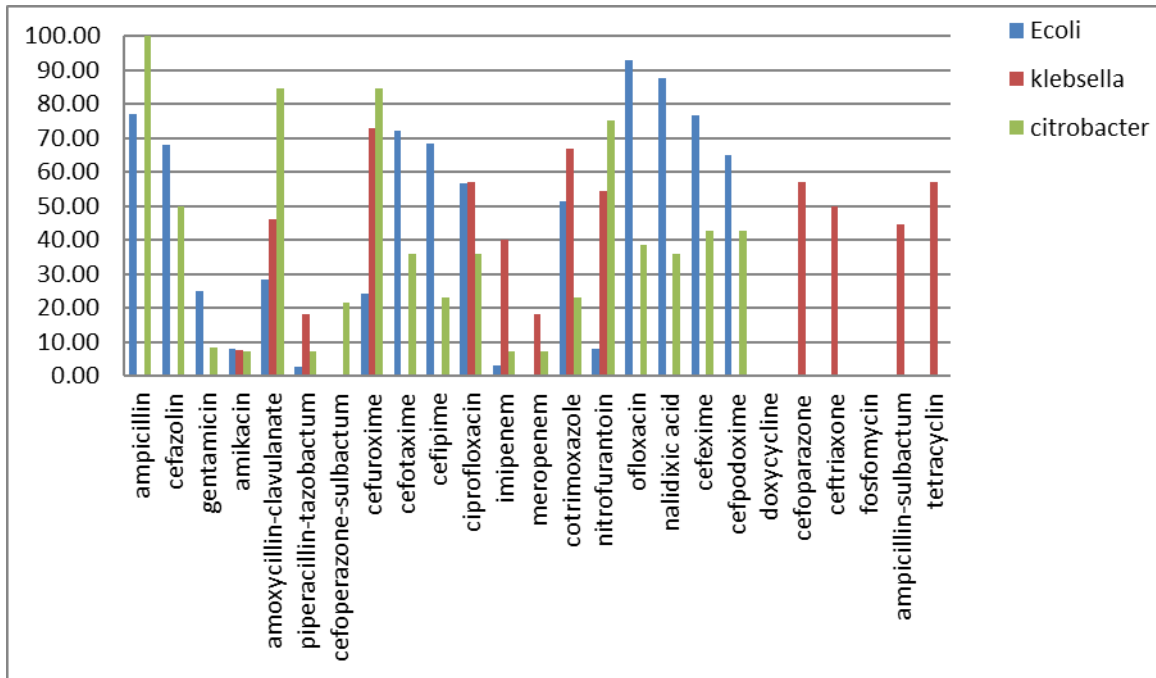
36males and 51 females were included for analysis. The mean age of the study population was estimated to be 52 with male and female predominance in the age group above 50years.

Frequently observed pathogens in the culture was found to be E.coli [48.88%],

followed by Klebsiella [15.55%], Citrobacter [15.55%], Streptococci [7.77%], Pseudomonas [3.33%], Staphylococcus [3.33%], Enterococci [2.22%], Acinetobacter [1.11%] Proteus [1.11%] and Moraganella [1.11%] respectively. Citrobacter was previously described primarily as a nosocomial pathogen in elderly hospitalized patients who underwent some form of endourological procedures or having obstructive uropathy.⁽¹⁾

The study revealed a significant resistance to Amino-Penicillin, Cephalosporin, Quinolones and Cotrimoxazole by common uropathogens. Least resistance was noted for Aminoglycosides, Imipenem and Nitrofurantoin. A 7 day course of nitrofurantoin for empirical treatment of community acquired urinary tract infection is suggested. This study can contribute to the expanding literature on resistance pattern of antibiotics and its empirical management.

FIG 1: RESISTANCE PATTERN OF COMMON UROPATHOGENS



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