

Clinical and Economic Outcomes Associated with Urinary Tract Infections Caused by Extended Spectrum Beta-lactamase Producing Bacteria in a Tertiary Care Hospital

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ABSTRACT Urinary tract infections (UTIs) are common community-acquired infections. Increasing antibiotic resistance rates have resulted in challenges of their treatment. The aim of this study was to assess the effects of UTIs caused by pathogens producing ESBL and ciprofloxacin-resistant bacteria during hospitalization and the cost of antibiotic treatment. ESBL production was present in 51.1 percent of bacterial isolates, and resistance to ciprofloxacin in 54.5 percent. Whereas the in cases where ESBL-producing hospital stay duration was approximately 9 days and non-ESBL-producing bacteria about 5 days, statistically significant differences were found ($p=0.001$). Whereas the average cost of antibiotics used in treatment was USD 37.5, in cases involving ESBL-producing bacteria, approximately USD110.6, the difference was statistically significant ($p=0.001$). Resistance to antibiotics is a major problem in the treatment of UTIs. Resistance to ciprofloxacin and b-lactam antibiotics, which are the preferred empiric treatment, prolongs hospitalization and increases the cost of antibiotic treatment.