Abstract

Background and Objective: *Escherichia coli* is the most common cause of urinary tract infections in children and the leading cause of intra-abdominal infections (peritonitis and abscess) followed intestinal injuries. Urinary tract infection, including cystitis and pyelonephritis, is a common childhood infection. *E. coli* causes more than 90 percent of the community acquired and 50% of hospital acquired urinary tract infections; therefore, the determination of *E. coli* antibiotic susceptibility is a paramount importance to clinical and epidemiological purposes.

Material and Methods: In this cross-sectional study, 50 *E. coli* strains isolated from urine samples of children less than 7 years of age with urinary tract infections. They were compared for drug susceptibility testing by disc diffusion method with 50 strains of *Escherichia coli* isolated from stool samples of healthy children with the same age and sex pattern.

Results: The actual amount of drug sensitivity of uropathogenic and intestinal *Escherichia coli* strains to amikacin was 94 and 100%, nitrofurantoin 90 and 88%, gentamicin 66 and 94%, cefixime 56 and 60%, nalidixic acid 38 and 44% and to cotrimoxazole 28 and 32%, respectively.

Conclusion: the rate of resistance to gentamicin, Cefixime and nalidixic acid in urinary tract infection isolates were more than intestinal strains. The highest rate of drug resistance in urinary *Escherichia coli* isolates was associated with cotrimoxazole and the lowest one with amikacin.

Keywords: *Escherichia Coli*, Intra-Abdominal Infection, Drug Resistance, Urinary Tract Infection, Children