عنوان مقاله:

Prevalence and Pattern of Antibiotic Resistance of Escherichia Coli Causing Urinary Tract Infections in Patients Referring to a Laboratory in Kermanshah

محل انتشار:

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خلاصه مقاله:

Introduction: Uropathogenic Escherichia coli (UPEC) is among the primary cause of urinary tract infections (UTIs). This study was conducted to determine the antibiotic resistance pattern of E. coli isolates from UTIs in Kermanshah. Methods: In this study, ۱۸۰ midstream urine samples were collected from outpatients for five months. Based on differential biochemical tests such as oxidase, Indole, and movement, one hundred E. coli isolates were obtained. In order to determine the antibiotic susceptibility of the E. coli isolates, Kirby-Bauer method on the Müller Hinton Agar (Merck, Germany) was performed according to the CLSI instruction, using nalidixic acid (۳۰ mcg), gentamicin (۱۰ mcg), cefalotin (۳۰ mcg), co-trimoxazole (۱۰ mcg), and co-amoxiclav (۲۰ mcg) disks provided by a commercial company (Padtan Teb, Iran). Results: The mean age of the patients was ۴۳.۶۹ years. Out of ۱۰۰ E. coli-infected patients, ۷۴ were women with an average age of ۴۲.۷۷ years and ۲۶ men with an average age of ۴۵.۸۸ years. The highest rate of UTI was in women aged ۶۱-۷۰ years and the lowest in men aged ۷۱-۸۰ years. The youngest patient was a one-year-old boy, and the oldest was a ۹۵-year-old woman. The highest resistance was found to cefalotin (۸۲%), and only one sample was resistant to gentamicin (۱%). Conclusion: Gentamicin and co-amoxiclav are still effective drugs for the empirical treatment of urinary tract infections in Kermanshah. In contrast, cephalothin and possibly the first-generation cephalosporins are not recommended in this province.

کلمات کلیدی:

Escherichia coli, Urinary tract infection, Antibiotic resistance, Iran