

## عنوان مقاله:

Detection of qnrB Gene among Quinolone Resistant Escherichia coli Isolated from Kermanshah Hospitals

## محل انتشار:

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## خلاصه مقاله:

Background: Urinary tract infections are considered as a major health concern. Escherichia coli is the most common cause of urinary tract infections. The presence of qnr plasmid genes in bacteria is the main cause of resistance to quinolones. The aim of this study was to investigate the antibiotic resistance pattern and prevalence of qnrB gene in E. coli strains isolated from patients with urinary tract infections. Materials & Methods: In this cross-sectional study, samples were taken from patients with urinary tract infections, referred to Kermanshah hospitals during the spring of ۲۰۱۷. E. coli strains were identified by biochemical tests. Then antibiotic susceptibility testing was performed for the isolates by the disc diffusion method. Following that, qnrB resistance gene was detected by PCR; finally, data were analyzed by SPSS software Ver. ۲۳. Findings: In this study, ۱۰۵ E. coli strains were isolated from urine specimens. The strains resistance rate to nalidixic acid, ciprofloxacin, and ofloxacin antibiotics was ۶۲.۸۵, ۳۸.۰۹, and ۳۳.۳۳%, respectively. PCR results showed that ۶۷ strains (۶۳.۸%) had qnrB gene, and ۳۸ strains (۳۶.۱۹%) lacked this gene. Logistic regression analysis showed that there was a significant relationship between the presence of qnrB gene and nalidixic resistance. Conclusion: The results of this study show that the frequency of qnrB gene among the E. coli strains isolated from urinary tract infections is fairly high in Kermanshah. Therefore, it is necessary to do further .investigates using molecular techniques and to take serious preventive measures

## کلمات کلیدی:

Escherichia coli, Quinolones, qnrB, Urinary tract infection

## لینک ثابت مقاله در پایگاه سیویلیکا:

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