

Abstract

Uropathogenic *Escherichia coli* is the main pathogen in urinary tract infections. Microcins was produced in urine as the one of the most important products that be synthesized by UPEC extracellularly, which helps to develop urinary tract infection. The first step to confront and inhibit of this pathogen is the identification of the major virulence factors. The main objective of this study was to determine the frequency of genes encoding Microcins (*mcm*, *mch*, *mcb*, *mcl*, *mcv*, *mcj* and *mcc*) determined. The study were conducted on 100 *Escherichia coli* isolates. These genes frequency were performed Multiplex-PCR and Uniplex-PCR method. A total of the 100 *Escherichia coli* isolates, *mcm* gene with 34% highest frequencies and *mcb*, *mcl* and *mcc* genes were not detected in any of the isolates the lowest frequency, respectively. Gene frequency for *mcv*, *mch* and *mcj* genes were detected 27%, 22% and 1% respectively. The results showed that *mcm*, *mch*, *mcv* most common disease-causing genes in *E. coli* isolated from urinary tract infection is in the city of Zabol. This could be information about the importance of infection in genitourinary pathology, management - CVI and provide treatment strategies.

Keywords: Microcin, Urinary Tract Infection, Uropathogenic *Escherichia coli* (UPEC)



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**Prevalence of Genes Encoding Microcins in
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