

## عنوان مقاله:

Shiga Toxigenic Escherichia Coli Antimicrobial Resistance Properties in Diabetic and Nondiabetic Pediatric Patients;  
A Case-Control Study

## محل انتشار:

مجله بین المللی کودکان, دوره 5, شماره 11 (سال: 1396)

تعداد صفحات اصل مقاله: 10

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## خلاصه مقاله:

Background Resistant Shiga toxigenic Escherichia coli (STEC), is the most prevalent source of diarrhea in pediatrics. This study was conducted to investigate the antimicrobial resistance properties of STEC strains of diabetic and non-diabetic pediatrics with diarrhea. Materials and Methods: This was a case-control study conducted from December 2014 to September 2015 in an educational hospital, Jiroft city, Iran. Diarrheic stool samples were collected from diabetic (n= 385) and non-diabetic (n= 300) pediatrics. The samples were cultured and the STEC strains were tested by disk diffusion and polymerase chain reaction (PCR) amplification were applied for detecting antibiotic resistance genes. Results Sampling was performed from 685 patients (51.8% male). Total prevalence of STEC strains in diabetic and non-diabetic pediatrics were 6.5% and 3.0%, respectively (P = 0.007). Prevalence of the genes that encode resistance against ampicillin (CITM), fluoroquinolone (qnr), trimethoprim (dfrA1), tetracycline (tetA), gentamicin [aac(3)-IV] and sulfonamide (sul1) were 97.1%, 64.7%, 61.8%, 58.8%, 58.3% and 52.9%, respectively. Non-diabetic pediatrics harbored the lower prevalence of antibiotic resistance genes (P = 0.034). Conclusion High numbers of STEC, especially O157 strains, showed a multidrug-resistance against ampicillin, ciprofloxacin, gentamycin, sulfamethoxazole, and tetracycline. CITM, qnr, dfrA1, tetA, [aac(3)-IV] and sul1 antibiotic resistance genes were identified in the STEC strains of diarrheic samples of diabetic and non-diabetic pediatric patients

## کلمات کلیدی:

Antimicrobial resistance properties, Diabetes, Diarrhea, Pediatrics, Shiga toxin producing Escherichia coli

## لینک ثابت مقاله در پایگاه سیویلیکا:

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