

عنوان مقاله:

Genetic Characterization of Antibiotic Resistant Salmonella Enterica Serovars Isolated from Iranian Patients

محل انتشار:

سیزدهمین کنگره بین المللی میکروب شناسی بالینی استاد البرزی (سال: 1398)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

Background and Objectives: Genetic elements carrying antibiotic resistance genes have been shown as a major cause of increasing in prevalence of Salmonella enterica serovars resistant to antimicrobial agents in the last years. Determination of antimicrobial agents' resistance patterns and investigation of the prevalence of these elements such as class 1 and 2 integrons in clinical isolates of S. enterica serovars were of the aims of the present study. **Materials and Methods:** Salmonella isolates, recovered from patients with salmonellosis, and admitted to Medical Children Hospital, Tehran, Iran during 2015-2016 were included in our study. Bacterial isolates were identified using standard biochemical and agglutination tests. Antimicrobial susceptibility testing was performed according to the Clinical and Laboratory Standards Institute guidelines. Polymerase Chain Reaction (PCR) assay, using specific primers, was used to investigate the presence of class 1 and 2 integrons in the isolates. **Results:** Integrons were detected in 45 (32%) of all 138 Salmonella strains isolated in this study. Class 1 and 2 integrons were detected in 24 (17.3%) and 21 (15.2%) isolates, respectively. All integron-positive isolates showed multidrug-resistant phenotypes. Resistance to more than three antimicrobial agents was observed in integron-positive isolates. **Conclusions:** Our findings showed that integrons were widely distributed among S. enterica isolates in Tehran. Class 1 integrons are more prevalent than class 2 integrons in Salmonella isolates, and there is an association with MDR patterns. Therefore, these integrons are more likely to be involved in the distribution of resistant phenotypes in Salmonella strains.

کلمات کلیدی:

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