

عنوان مقاله:

Study of class 1 and Y integrons and antimicrobial resistance in Salmonella isolated from broiler chicks in Chaharmahal va Bakhtiari province

محل انتشار:

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خلاصه مقاله:

Background and Aim: High prevalent of drug resistant in Salmonella is a threat to human's health. Integrons are one of the most important factors that can contribute to the occurrence of MDR bacteria. The aim of this study was to determine the prevalence of class 1, Y integrons among Salmonella strains isolated from broiler chicks. Materials and Methods: This study was performed on 100 Salmonella isolated strains, collected from broiler chicks samples during the summer of Yola in Chaharmahal va Bakhtiari. The prevalence of class land Y integrons were verified using specific primers by multiplex PCR assay. Susceptibility to antimicrobial agents was tested using the disk diffusion method according to the CLSI Yoll. In the end integrons prevalence and drug resistance were analyzed by using SPSS software. Results: Screening of Salmonella isolates revealed the prevalence of class 1, Y integrons (۵۰%), (YA%) and (FA%), respectively. Based on the results of the antibiogram test, the highest rate of antibiotic resistance was Ampicillin among all isolates. The highest rate of antibiotic resistance in samples of Intl 1-positive have been to Gentamycin and Tetracycline (15%) and in Intl Y-positive have been to Gentamycin (٣٥.٧%). Also the intermediate resistant strains to Chloramphenicol in the samples of Intl 1-positive were YY% and in the samples of Intl Y-positive were FY.9%. Conclusions: The presence of two classes of integrons and its direct connection with the MDR in Salmonella is concerned. Based on the results of this study, significant correlations were between MDR and integrons .that are a serious problem in human and veterinary medicine

کلمات کلیدی: Salmonella, Integrons, Drug resistance, Broiler chicks, سالمونلا, اینتگرون, مقاومت دارویی, مرغ گوشتى.

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