

عنوان مقاله:

The frequency of integrons of antibiotic resistant in *Stenotrophomonas maltophilia* isolates in Hamadan/Iran

محل انتشار:

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خلاصه مقاله:

Background and Aim: *Stenotrophomonas maltophilia* is an important multidrug-resistant nosocomial pathogen that leads to respiratory tract infections and urinary tract. Due to the increasing of antibiotic resistance in *S. maltophilia*, treatment of infections caused by these bacteria has been difficult. The aims of this study was detection of antibiotic resistance pattern and identify of class I and II integrons and associated gene cassettes in clinical isolates of *S. maltophilia*. Materials and Methods: In this cross-sectional study, of ۲۴۶ clinical specimen were collected from educational hospitals of Hamadan university of medical sciences, ۱۲ isolates of *S. maltophilia* were collected in ۲۰۱۵. After the culture, isolates were verified by standard biochemical methods. Antibiotic susceptibility was determined against ۱۳ antibiotics. Presence of Class I and II integrons genes were tested using specific primers by PCR. Results: In the pattern of antibiotic resistance, the highest resistance rate showed to Cefditoren, Ceftriaxone, Cefotaxime antibiotics and the lowest resistance to Amikacin, Imipenem, Ofloxacin, Trimethoprim-Sulphamethoxazole and Ciprofloxacin antibiotics were reported. All *S. maltophilia* strains carried class I integrons. No isolate carry class II integrons and gene cassettes. Conclusions: The result of this study indicates a high prevalence of class I integrons in *S. maltophilia* isolates. Thus, identification of these resistance genes for infection control programs and to prevent the spread of resistant strains is very important.

کلمات کلیدی:

Stenotrophomonas maltophilia isolates, Integron, Antibiotic resistance
اینتگرئون، مقاومت آنتی بیوتیکی

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