

عنوان مقاله:

Antimicrobials and Enterobacterial Repetitive Intergenic Consensus (ERIC) Polymerase Chain Reaction (PCR) Patterns of Nosocomial *Serratia Marcescens* Isolates: A One Year Prospective Study (June 2013-May 2014) in a Rural Hospital in the Republic of Trinidad and Tobago

محل انتشار:

فصلنامه پیشرفت در تحقیقات بیوشیمی و شیمی، دوره 3، شماره 2 (سال: 1399)

تعداد صفحات اصل مقاله: 16

نویسندگان:

Camille Elliott - *Department of Para- Clinical Sciences, Pathology and Microbiology Unit, Faculty of Medical Sciences, University of the West Indies, Eric Williams Medical Complex, Mt. Hope Hospital, Champs Fleurs, Trinidad and Tobago, West Indies*

Angel Vaillant - *Department of Para- Clinical Sciences, Pathology and Microbiology Unit, Faculty of Medical Sciences, University of the West Indies, Eric Williams Medical Complex, Mt. Hope Hospital, Champs Fleurs, Trinidad and Tobago, West Indies*

خلاصه مقاله:

Background: *Serratia marcescens* is a gram-negative bacterium from family of Enterobacteriaceae. It is a human pathogen that is involved in nosocomial infection outbreaks that have proven difficult to manage. PCR-based techniques are suitable given the genus. *Serratia* has a higher GC content than many other members of the Enterobacteriaceae. The ERIC PCR-based fingerprinting method was used to study the PCR patterns of clinical *Serratia marcescens* isolates and antimicrobial susceptibility profiles. Methods: Surveillance was conducted for nosocomial cases of interest and the nosocomial pathogens were retrieved for identification via morphological and additional biochemical tests. Additionally, antimicrobial susceptibility tests and ERIC Polymerase Chain Reaction (PCR) based fingerprinting molecular method was done on the clinical *S. marcescens* isolates. Results: From the study, five different strains of the clinical *Serratia marcescens* isolates were recovered and similarly five distinct susceptibility patterns were observed from the clinical *S. marcescens* isolates indicating consistency in the number of strains present in the clinical *S. marcescens* isolates. Conclusions: ERIC PCR fingerprinting base technique; a simple, rapid and cheap method for the determination of genetic relatedness between *Serratia marcescens* isolates can be applied for the thorough evaluation of nosocomial outbreaks to detect the source of infection and control the spreading of the infection.

کلمات کلیدی:

ERIC PCR-based fingerprinting method, *Serratia marcescens*, Antimicrobials, Antibiotic Resistance

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1017112>



