

عنوان مقاله:

Molecular Analysis of the Presence of pvl, spa, and mecA Genes and Their Correlation with a Range of Antibiotics in Staphylococcus aureus Collected from Burn Patients

محل انتشار:

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خلاصه مقاله:

Background and Objective: Staphylococcus aureus is one of the most important human pathogens and common causes of nosocomial and acquired infections in the world. The aim of this study was to investigate antibiotic resistance in methicillin-resistant S. aureus (MRSA) strains and the molecular properties of S. aureus strains. **Materials and Methods:** For this purpose, a descriptive study was performed in ۲۰۱۷ on ۵۶ strains of S. aureus isolated from clinical specimens. MecA subclasses were also determined by Multiplex RCR reaction. The pvl and spa genes in these strains were determined by PCR reaction. **Results:** The highest resistance of the strains was observed to be to the antibiotics oxacillin, ceftioxyime and erythromycin, and vancomycin (۱۲.۵%). ۱۰۰% of methicillin-resistant S. aureus strains contained mecA gene, and more than ۵۰% of isolated strains were associated with nosocomial infections. In addition, ۳SCCmec type and ۱ SCCmec type were identified as the dominant subtypes in this study and (۱۷.۸%). Also, ۱۰ isolated strains could not be typed. **Conclusion:** The results showed that the spa gene distribution was present in ۸۲% of the samples. Out of ۴۶ samples, ۴۰ samples belonged to wound samples. Also, pvl gene was observed in ۱۲% (۷ samples) of samples. There is an association between mecA gene and resistance to the antibiotics oxacillin, ceftioxyime, and erythromycin in methicillin-resistant S. aureus strains.

کلمات کلیدی:

Antibiotic resistance, mecA, pvl, spa, Staphylococcus aureus, استافیلوکوکوس اورئوس, pvl, spa, mecA, مقاومت آنتی بیوتیکی

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