

## عنوان مقاله:

Adhesion Factors and Association with Antibiotic Resistance among Clinical Isolates of Staphylococcus aureus

## محل انتشار:

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## خلاصه مقاله:

**Background and Aims:** Staphylococcus aureus adhesion factors can reinforce the pathogenicity of the bacteria. The aim of this study was to identify adhesion factors among clinical isolates of methicillin-resistant S. aureus and determine the association between these factors and antibiotic resistance patterns. **Materials and Methods:** In an analytical study from October ۲۰۱۶ to April ۲۰۱۷, ۳۰۲ clinical isolates of S. aureus were confirmed by biochemical tests. Methicillin-resistant strains were determined by phenotypic methods. Multiplex PCR method was used to identify adhesion factors. In this way, bbp, cna, eno and ebpS genes were identified among different isolates. **Results:** A total of ۳۰۲ clinical isolates of S. aureus were isolated from different clinical samples including wound, blood, urine, trachea, catheter, swabs. Of ۳۰۲ isolates, ۱۲۳ were methicillin resistant and ۷۳.۵۳% and ۷۵.۷% of the isolates were resistant to erythromycin and penicillin, respectively. The incidence of resistance genes among among methicillin resistant S. aureus isolates were as follows: bbp (۱۰ isolates: ۶.۸۹%), cna (۶ isolates: ۱۳.۴%), eno (۲۸ isolates: ۱۹.۳۱%) and ebpS (۱۹ isolates: ۱۳.۱%),. There was a significant correlation between the antibiotic resistance patterns and the frequency of adhesion factors ( $P \leq 0.05$ ). **Conclusions:** According to the results, there was a significant correlation between adhesion factors and antibiotic resistance among methicillin-resistant isolates of S. aureus.

## کلمات کلیدی:

Antibiotic Resistance, Methicillin Resistance of Staphylococcus aureus, Adhesion factors  
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