

عنوان مقاله:

Phonotypic Investigation of Biofilm Formation and Determination of Presence of bap and blaOXA-51 Genes in Acinetobacter baumannii From Clinical Specimens in Tehran

محل انتشار:

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خلاصه مقاله:

Background: Acinetobacter baumannii is a non-fermentative gram-negative coccobacill that has high level of resistance to antimicrobial agents. Biofilm formation is an important feature of most clinical isolates of Acinetobacter spp, this led to higher resistance to antibiotics. The current study aimed to assess the ability of biofilm production and to determine the frequency of bap gene in clinical isolates of Acinetobacter baumannii. Materials & Methods: This descriptive cross-sectional study was performed on 165 strains collected from hospitals of Tehran in 2019 and confirmatory tests were performed to identify the bacteria. The antibiotic resistance pattern of the isolates was determined by disk diffusion method against 10 antibiotics and also the ability of biofilm production was evaluated by microtiter plate method (MPT) and tube method (TM). Subsequently Molecular assays of blaOXA-51 and bap genes identification and its frequency were investigated. Results: In this study, among 165 isolates examined, 73 isolates were confirmed as Acinetobacter baumannii. Among 73 strains studied the most antibiotic resistance was imipenem (94.52%). blaOXA-51 and bap genes were detected in 100% and 53.42% of isolates. Also, 8 isolates (10.95%) by MTP and 7 isolates (9.58%) by the TM method were able to form strong biofilm. Conclusion: The results obtained showed that in consistent with other researches, biofilm formation in Acinetobacter baumannii isolates was associated .with present of bap gene

کلمات کلیدی:

Acinetobacter baumannii, biofilm, bap, اسينتو باكتر بوماني, بيوفيلم,

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