



## Molecular Study of Staphylococcus Epidermidis Strains Isolated from Clinical Specimens from Different parts of Rouhani Hospital (Babol, Iran)

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### Abstract:

Staphylococcus epidermidis is known as the most predominant member of coagulase negative staphylococci which can cause nosocomial infections especially in ICU and NICU wards. Aim of this study was to investigate the molecular characterization of *S. epidermidis* strains obtained from the Rouhani Hospital in Babol, Iran. Materials and Methods: In this descriptive study, a total of 60 *S. epidermidis* strains were collected. Thereafter, the antimicrobial susceptibility testing, the prevalence of *mecA* and *icaD* gene was evaluated. Finally the molecular pattern of isolates was determined by using RAPD-PCR technique. Results: A total of 50 clinical strains and 10 environmental isolates were obtained from hospitalized patients from different specimens such as bloodstream, urine, catheter, body fluids and etc. by disc diffusion method the high rates of resistance were belonged to oxacillin (70.5%) and ciprofloxacin (63.9%). The prevalence of *mecA* and *icaD* genes was reported 85% and 41.6% respectively. 24 RAPD-Type was identified by using RAPD-PCR method which indicates the high genotypic diversity in the *S. epidermidis* isolates. Conclusion: The high risk of transmission of infection between the wards and also the Rouhani Hospital staff should be taken seriously. Keywords: Staphylococcus Epidermidis; Molecular Typing; ICU; Nosocomial Infections.



### Biography:

Meysam Maghsoodlou was a Microbiologist. He was currently working as Student Research Committee, IR Iran.

### Recent Publications:

1. Analysis of the Validity of Perioperative Prophylaxis in Maxillofacial Surgery in the Context of Antibiotic Therapy
2. Technology Innovations in Antibiotics: Discovery & Development

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