

## عنوان مقاله:

DETECTION OF B -LACTAMASE ACTIVITY IN VARIOUS CLINICAL COAGULASE NEGATIVE STAPHYLOCOCCI  
AND ITS CORRELATION WITH DRUG RESISTANCE

## محل انتشار:

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## خلاصه مقاله:

**Background and Aim:** Staphylococcus epidermidis, the most important member in the coagulase- negative Staphylococci. Beta lactams are the most widely used antibiotics for treatment of staphylococcal infections and  $\beta$  lactamase enzymes are the greatest source of resistance to these antibiotics. The aim of this study was to assess the frequency of  $\beta$ -lactamase positive bacteria and antibiogram pattern in Coagulase Negative Staphylococci isolated from various clinical samples and healthy carriers. **Methods:** Bacterial identification was performed with microbiological methods ,antibiogram pattern was performed with Kirby Bauer method to five beta-lactam antibiotics (Rosco.co) .  $\beta$ -lactamase production was performed with two methods Iodometric and Acidometric methods . **Results:** A total of 170 isolates of Staphylococcus epidermidis isolated from various clinical samples and 80 nasal isolates of healthy carriers. Results obtained from the antibiogram showed that the isolates exhibited the high resistance to Penicillin and y. Iodometric and acidometric methods indicated presence of beta-lactamase in 75.55 and 59.99% of the S. epidermis isolates, respectively. 76.33 and 27.77% of the isolates resistant to Penicillin tested positive in the iodometric and acidometric tests, respectively .  $\beta$ -lactamase production was performed with Acidometric method and antibiogram pattern was performed with Kirby Bauer method . **Conclusion:** Use of the antibiogram method on beta-lactam antibiotics showed that this method was only unsuitable for determining the treatment strategy for infection caused by these organisms, The iodometric test was a better method for determine  $\beta$ -lactamase production CONs strains , which can be useful in selecting the suitable antibiotic

## کلمات کلیدی:

$\beta$ -lactamases, drug resistance, coagulase negative staphylococci

## لینک ثابت مقاله در پایگاه سیویلیکا:

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