

## عنوان مقاله:

Prevalence of antibiotic resistance among Staphylococcus aureus isolates obtained from healthy community

## محل انتشار:

پنجمین کنگره باکتری شناسی پزشکی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

Background: Staphylococcus aureus (S.aureus) is a virulent human pathogen that is the main cause of the wide range of infections. At present, the emergence of methicillin resistant S.aureus (MRSA) has become a serious menace in hospitals and communities. Resistance to methicillin and all  $\beta$ -lactam antibiotics is related to the low affinity of a penicillin-binding protein (PBP2a) that is encoded by the mecA gene. This gene not present in susceptible staphylococci. So, it is necessary, continuous monitoring of drug resistance to offer more effective therapeutics approaches. The aim of this study was the molecular examination of prevalence of methicillin-resistant strains obtained from healthy community. Methods: In a study between 2017 to 2018 years, a total of 400 samples were obtained from the nasal of students high school schools in Tabriz. After confirmation of S. aureus strains by standard microbial tests, the antibiotic resistance patterns were determined by the disk diffusion method. The presence of methicillin resistance gene (mecA) was examined by PCR reaction. Results: The results showed that from 400 students, 16.5% (66 samples) were positive S.aureus. So that, 96.9% (64 samples) of S.aureus isolates were resistant to ampicillin and penicillin antibiotics (positive auros) while only 3% (2 samples) were resistant to methicillin. Also, the molecular examination of antibiotic resistance showed that the presence of the mecA gene in 54.54% (36 samples) from S.aureus positive samples. Conclusion: The results of this study highlight an increase in the prevalence of MRSA in student's community that is a serious threat to the healthy community

## کلمات کلیدی:

Staphylococcus aureus, MRSA, mecA, healthy community

## لینک ثابت مقاله در پایگاه سیویلیکا:

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