3rd World Congress and Expo on **Applied Microbiology** November 07-09, 2016

Investigation of antibiotic resistance properties of *Staphylococcus aureus* isolates originated from throat,

Rasih Felek and Ibrahim Yildirim Akdeniz University, Turkey

nose and hand cultures of food workers

S amples were collected from food workers' hands, noses and throats. The aim of this study is to investigate the resistance of these *S*. *aureus* strains to several kinds of antibiotics and beta- lactamase activities of *S*. *aureus* stains. 150 *S*. *aureus* isolates of workers were investigated. The strains of *S*. *aureus* which were isolated from nose culture were found resistant to penicillin in 92%, oxacillin in 36%, erythtomycin in 24%, clindamycin in 16%, gentamycin in 40%, rifampicin in 44%, ciprofloxacin in 8% and trimetoprim/sulfamethoxasol in 6%. The strains of *S*. *aureus* which were isolated from throat cultures were found resistant to penicillin in 88%, oxacillin in 32%, erythtomycin in 26%, clindamycin in 14%, gentamycin in 42%, rifampicin in 44%, ciprofloxacin in 8% and trimetoprim/sulfametoksazol in 12%. The strains of *S*. *aureus* which were isolated from hand cultures were found resistant to penicillin in 80%, oxacillin in 30%, erythtomycin in 24%, clindamycin in 16%, gentamycin in 16%, gentamycin in 44%, rifampicin in 36%, ciprofloxacin in 8% and trimetoprim/sulfametoksazol in 12%. The strains of *S*. *aureus* which were isolated from hand cultures were found resistant to penicillin in 10% and trimetoprim/sulfamethoxasol in 18%. When all nose, throat and hand culture samples were evaluated together, the strains of *S*. *aureus* were found resistant to penicillin in 88%, oxacillin in 32.7%, erythtomycin in 24.7%, clindamycin in 15.3%, gentamycin in 42%, rifampicin in 41.3%, ciprofloxacin in 8.7% and trimetoprim/sulfamethoxasol in 12%. Total beta-lactamase ratios for nose, throat and hand samples of food workers were found positive in 132 (88.4%) out of 150 samples. General precautions to minimize the risks in terms of *S*. *aureus*, the current situation of antibiotic resistance and possible precautions were discussed.

Biography

Rasih Felek has completed his MD from Hacettepe University School of Medicine and Postdoctoral studies from Ataturk University School of Medicine. He has published more than 14 papers in reputed journals.

rasihf@akdeniz.edu.tr

Dubai, UAE

Notes: