Evaluation of all the isolated Gram positive cocci: Identification and resistance ratios, in Kocatepe University Hospital, during the 2012-2015

Recep Kesli, Cengiz Demir and Hayriye Tokay
Afyon Kocatepe University, Turkey

Aim: This study was aimed to determine the resistance rates of the tested antibiotics for Gram positive cocci strains at Microbiology Laboratory, ANS Research and Practice Hospital, Afyon Kocatepe University, between October 2012 and September 2015.

Methods: Identification and antibiotic resistance tests were determined by using both the conventional methods and automated system (VITEK2).

Results: Of the totally isolated 1,317 Gram positives, Staphylococcus aureus were found as the most frequently isolated strain 1,050 (79.7%), followed by Streptococcus spp., 147 (11.2%) and Enterococcus spp., 120 (9.1%). Of all the the S. aureus strains 459 (43.7%) were detected as oxacillin resistant and identified as methicillin resistant S. aureus (MRSA). Resistance rates of E. faecalis strains against to ampicillin, erythromycin and ciprofloxacin were 12%, 95% and 11.8% respectively. All the enterococci strains were found to be susceptible to vancomycin, teicoplanin and linezolid. The resistance rates of Streptococcus agalactiae against to erythromycin and clindamycin were found to be as 36%, 28% and for Group-A beta-hemolytic Streptococcus strains were 17.9%, 1.2% respectively. None of the isolates exhibited resistance to penicillin and vancomycin for Group-A beta-hemolytic Streptococcus and Streptococcus agalactiae strains. The resistance rates of S. aureus against to clindamycin, erythromycin, gentamicin, tetracycline, sulfamethoxazole/trimethoprim were found to be as 38 (9.6%), 77 (19.5%), 116 (29.4), 152 (38.6%), 28 (7.1) respectively.

Conclusions: High resistance ratios, obtained from the study in Gram positive cocci was emphasized as a serious clinical problem in our hospital.

Biography
Recep Kesli was graduated from Erciyes University, Faculty of Medicine. He has obtained Microbiology Specialist title in 2001. He is working at Afyon Kocatepe University, School of Medicine as an Associate Professor and Chair. He has published a book and wrote many book chapters. His areas of interests are diagnostic techniques of HCV, Helicobacter pylori and anaerobic bacteria. He has also published articles in international SCI/SCIE and national journals (more than 60) in Turkish and English.

recepkesli@gmail.com

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