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## Surveillance of critical hospital-acquired infections; MRSA and VRE: 3 years retrospective study

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Vancomycin-resistant Enterococci (VRE) and methicillin-resistant *Staphylococcus aureus* (MRSA) have emerged as important nosocomial pathogens. Active surveillance of MRSA and VRE includes the detection and observing patients who are asymptomatically colonized with these microorganisms. Precautions for both carriers and infected patients target to reduce the spread of MRSA and VRE in a hospital and decrease hospital-acquired infections due to these organisms. The aim of this study is to evaluate the 3 years-surveillance program of Gulhane Military Medical Academy and Faculty of Medicine Training Hospital retrospectively. Rectal swab samples for screening of VRE and axillar, inguinal and nasal swab samples for screening MRSA were collected from inpatients. VRE selective medium (*Enterococcus* agar containing 6µg of vancomycin and 8µg of seftazidime per ml) and MRSA chrom-agar were used to screen related isolates. Identification and antimicrobial susceptibilities of bacterial isolates were performed by both conventional methods and automated microbiology system, Phoenix 100 (BD). From 1760 rectal swab samples, 174 (100 in 2012; 54 in 2013 and 20 in 2014) VRE were isolated from 1760 axillar, inguinal and nasal swab samples, 42 (10 in 2012; 10 in 2013 and 22 in 2014) MRSA were isolated. Hospital-acquired MRSA rates in 2012, 2013 and 2014 were 1.8%, 1.1% and 1.3%; Hospital-acquired VRE rates were 1.2%, 0% and 0.2% respectively. An expanded VRE were MRSA can be prevented and can lead to decrease in hospital-acquired infections.

## Biography

Aylin Uskudar Guclu has completed her PhD program in Biological Sciences in Middle East Technical University in 2011. She has been educating on Clinical Microbiology PhD program in Gulhane Military Medical Academy since 2013. She has been working as Biologist in the department of Clinical Microbiology of the same Academy, since 2002. She is a Member of KLIMUD (Clinical Microbiology and Expertise Association in Turkey) and Turkish Microbiology Community (TMC).

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