

Resistance Pattern of *Enterococci* Isolated from Nosocomial Infections in the Hospitals Located in Gonbad and Gorgan Cities, Iran

Naghipoor, E. (MSc)

MSc of Microbiology, School of Biology Sciences, Islamic Azad University, Tonekabon Branch, Iran

Raefi, A. (Msc)

MSc of Microbiology, School of Biology Sciences, Islamic Azad University, Tonekabon Branch, Iran

Nasrollahi Omran, A. (PhD)

Associate Professor of Microbiology, School of Biology Sciences, Islamic Azad University, Tonekabon Branch, Iran

Corresponding Author: Raefi, A.

Email: alito.raefi@yahoo.com

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Abstract

Background and Objective: Enterococci are normal flora of human body and considered as the third leading cause of nosocomial infections. The aim of this study was to determine drug resistance of Enterococcus species through biochemical methods.

Material and Methods: One hundred twenty-eight of enterococcus suspected samples were isolated from gorgan and gonbad's hospitals from April to June, 2013. The samples were cultured on blood agar, chrome-agar, EMB agar and some special cultures of isolation of Enterococcus species. Suspension of bacteria was grown in Mueller Hinton agar and the inhibition zone diameter was determined by disk antibiogram.

Results: Of 128 samples, 109(85.15%) were *enterococci faecalis* and 19 (14.85%) *Enterococcus Faecium*. In all of 128 cases, eight showed resistance to amoxicillin, ten to ampicillin, five to gentamicin, five to ciprofloxacin, six to chloramphenicol, four to cephalexin and one to vancomycin.

Conclusion: It seems to be necessary to use drug sensitivity test for having appropriate treatment and preventing from resistance strains.

Keywords: Enterococci, Antibiotic Resistance, Antibiogram