2nd European Otolaryngology
ENT Surgery Conference
&
International Conference on
Craniofacial Surgery

J Otol Rhinol, 6:6
DOI: 10.4172/2324-8785-C1-006

SciTechnol

October 16-18, 2017 Rome, Italy

Antimicrobial resistance profile of *Staphylococcus aureus* isolates isolated from ear discharges of patients at University of Hawassa comprehensive specialized hospital

Muluken Bekele, Serawit Deyno and **Alemayehu Toma Hawassa**
Hawassa University, Ethiopia

Statement of the Problem: Drug-resistant microorganisms are a growing global danger. Strains of S. aureus have developed resistance to many commonly used antimicrobials due to indiscriminate use of antimicrobials, and treatment becoming a challenge. Studies assessing pattern and determinants of S. aureus resistance in ear infection in Ethiopia are very scarce. The purpose of this study is to present the overview of pattern and determinants S. aureus resistance from samples of ear discharge in Ethiopia.

Methodology: A prospective cross-sectional study was conducted on patients who visit ENT clinic of University of Hawassa comprehensive specialized hospital from February 1, 2016 to November 1, 2016. 117 specimens were collected with sterile applicator cotton swab from 117 patients with ear discharge visiting the clinic. Data was fed and then edited, cleared, entered and analyzed using SPSS version 20.

Findings: The prevalence of S. aureus infection was 28.2%. S. aureus isolates revealed up to 97.0% level of resistance pattern to the antimicrobials tested. In the determination of the susceptibility of S. aureus on nine selected antibiotics by disk diffusion technique, 97.0% of the isolates were resistant to cloxacilin and 74.2% showed resistance to vancomycin. The overall rate of MDR was 100%, all of the isolates were found to be resistant to more than two tested antimicrobials.

Conclusion & Significance: This study reveals that S. aureus has gotten frighteningly resistant to many of common antimicrobials used in Ethiopia. It is highly resistant to amoxicillin, vancomycin, amoxicillin -clavulanic acid, Gentamycin, kanamycin, amikacin. Resistance to vancomyin is terrifyingly high. Emergence of VRSA highlights the value of prudent prescribing of antimicrobials (including vancomycin) and avoiding their irrational use. Further researches which focus on identifying dynamics promoting resistance, identifying high risk strains and molecular genetic basis of resistance are needed. Recommendations are made for the responsible body to include novel drugs in national drug list in Ethiopia in order to delay resistance and treat resistant strains.

muluken72@yahoo.co.uk