
ABSTRACT

Antimicrobial resistance of *Staphylococcus aureus* isolated from Pus collections in Patients at the Traumatology unit of a secondary referral health setting in the Western Cameroon

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Tadongfack D.T.etal. Antimicrobial resistance of *Staphylococcus aureus* isolated from Pus collections in Patients at the Traumatology unit of a secondary referral health setting in the Western Cameroon. *J Exp Clin Microbiol.* 2022; 6(1):1-3.

ABSTRACT

Staphylococcus aureus is responsible of a wide range of both community and Hospital acquired infections. Several genomic

variability underlies the diversity of *S. aureus* strains responsible of the emergence of antibiotic resistance. The objective of the study was to assess the prevalence and profile of antibiotic resistance pattern *S. aureus* isolated from pus samples at the traumatology unit of Our Lady of Health Centre of Batseng'la in Dschang, Western Cameroon.

Key Words: *Staphylococcus aureus*; MRSA; Antimicrobial resistance; Multi drug resistance; Traumatology.

INTRODUCTION

This was a descriptive cross-sectional study, carried out over a period of five months (from January to May 2021) involving a total of 54 participants received at the traumatology unit of Our Lady of Health Centre of Batseng'la in Dschang, Western Cameroon. Pus samples collected from participants were seeded on Chapman Agar at 37°C for 24 hours. The colonies identification was based on catalase, coagulase and DNase tests. The antibiotic susceptibility test was performed using the Kirby Bauer disk diffusion method on Mueller-Hinton agar. Data were analysed using SPSS 25 Software.

RESULT

S. aureus was isolated in 22 of the 54 pus samples analysed, giving a frequency of 42.3%. The majority of strains (63.6%) were isolated from subjects less than 21 years old. Among these strains, 40.9% were MRSA and 86.4% presented multi-resistance patterns to the antibiotics tested. All strains of MRSA were found to be cross-resistant with one or more other antibiotics.

CONCLUSION

The multi-resistance of *S. aureus* to antibiotics is a reality. The application of point of care precision methods in the diagnosis of extremely flexible bacterial pathogens such as *S. aureus* as well as their susceptibility profiles may help in timely setting up adequate treatment protocols.

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Received: January,1,2022,Manuscript No. M-5954, Editor assigned: January-3-2022, PreQC No. P-5954; Reviewed: January,17,2022, QC No. Q-5954; Revised; January,18,2022 Manuscript No. R-5954,Published: January,25,2022, DOI:10.37532/puljcem,2022,6.1.



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