

## عنوان مقاله:

Isolation and Characterization of Coagulase Positive, Methicillin and Multi-Drug Resistant Staphylococcus and Mammaliococcus species Isolated from Wound of Patients Attending Federal Medical Centre, Yola, Adamawa State, Nigeria

## محل انتشار:

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## نویسندگان:

Olumuyiwa Adeyemo - *Department of Biotechnology, Faculty of Life Sciences, Modibbo Adama University, Yola, Adamawa State, Nigeria*

Olufemi Okunye - *Department of Pharmaceutical Microbiology, Faculty of Pharmacy, Olabisi Onabanjo University, Ago Iwoye, Ogun State, Nigeria*

Francisca Nwaokorie - *Department of Medical Laboratory Science, College of Medicine, University of Lagos, Lagos State, Nigeria*

Omri Kamet - *Department of Microbiology, Faculty of Life Sciences, Modibbo Adama University, Yola, Adamawa State, Nigeria*

## خلاصه مقاله:

Background and Aim: The treatment of bacterial infections especially of the family Staphylococcaceae is a major health burden that has led to economic losses, high morbidity and mortality rates globally. This study aimed at isolation and characterization of coagulase positive, methicillin and multi-drug resistant Staphylococci isolated from wounds of patients. Materials and Methods: Forty-five wound swabs were collected using sterile swab sticks. Isolation was done by streaking technique on mannitol salt agar. The isolates obtained were screened for methicillin and multi-drug resistance using disk diffusion method. Biochemical and molecular characteristics using 16S rDNA gene were used to identify the selected isolates. Results: Four Staphylococci isolates resistant to methicillin (0.00 mm to 9.0 mm) were selected out of thirty-one. Reactions to catalase and coagulase productions were positive. Three out of the four isolates were identified using their 16S rDNA genes and they were found to be closely related to other family members of Staphylococcaceae at GenBank. The fourth isolate was identified using its biochemical characteristics as Staphylococcus sp. HFS4. The three identified isolates were M. sciuri HFS1 (ON340756), M. sciuri HFS3 (ON340770) and S. haemolyticus HFS2 (ON35435). The four isolates were resistant to more than five antibiotics that cut across all the classes of antibiotics. The multiple antimicrobial indices were between 0.5 and 0.8. Conclusion: There is need for regular antimicrobial resistance surveillance within the hospital environment, earlier detection and correct prescription of potent antimicrobials will check the spread of Staphylococci infections and their virulent genes.

## کلمات کلیدی:

Antimicrobial surveillance, Methicillin and Multi-drug resistance, Mammaliococcus sciuri, Staphylococcus haemolyticus, Coagulase Positive Staphylococci, نظارت ضد میکروبی؛ متی سیلین و مقاومت چند دارویی، Mammaliococcus sciuri، استافیلوکوک همولیتیکوس؛

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