

Studies On Susceptibility Of Methicillin –Resistant Staphylococcus aureus To Some Nigerian Honey

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Abstarc :

Abstract: This study was aimed at determining the susceptibility of methicillin-resistant S. aureus (MRSA) isolates to some Nigerian honey. Sixty isolates of S. aureus were obtained from patients attending State Hospital, Jimeta Yola, Adamawa State. Twenty out of the sixty isolates were MRSA which were assessed for susceptibility or resistance to three (one processed and two crude) local honey samples in different concentrations and two commonly used antibiotics namely ciprofloxacin and ofloxacin using disk diffusion assay. All the twenty MRSA were susceptible to undiluted Sardauna plateau honey and its different concentrations of 50%, 25% and 13% (with growth inhibition zone ranging from 13 to 33 mm) but 25% of the isolates were resistant at concentrations of 6%. Against the MRSA isolates, undiluted Hong honey recorded 85% antibacterial activity, followed by 65%, 55%, and 5% respectively for its lower dilutions of 50%, 25% and 13% (with growth inhibition zone 12 or less than 12 mm). The undiluted Abuja honey sample recorded 85% antibacterial activity, followed by 35% and 15% respectively for its lower dilutions of 50% and 25%. Eighty five percent (85%) of the isolates were resistant to ofloxacin and 80% of the isolates were resistant to ciprofloxacin (growth inhibition zone 20 mm or less for ciprofloxacin and 15 mm or less for ofloxacin, respectively). Values of the minimum inhibitory concentration and the minimum bactericidal concentration of S.P. honey were in the range of 0.4%-0.5% and 0.8 - 1% respectively whereas the values for H. honey and A. honey were in the range of 0.9-0.1% and 1.9-2.0% and 3.5-4.0% respectively. [Nature and Science 2010;8(2):98-108]. (ISSN: 1545-0740).

Key Word :

MRSA, honey, methicillin, MIC, MBC

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