Antibacterial activity of honey against methicillin-resistant Staphylococcus aureus.

ABSTRACT

For centuries honey had a valued place in traditional medicine, being used in the treatment of wounds and diseases of the gut. The scientific community has now rekindled interest in the therapeutic use of honey in modern medicine and a number of published reports support its use in certain medical conditions, including burns and wounds. The aim of the present study is to the effectiveness of the antimicrobial activity of honey against Methicillin-Resistant Staphylococcus aureus (MRSA) and Methicillin-Sensitive Staphylococcus aureus (MSSA) isolates collected from various Malaysian hospitals. Thirty isolated of Staphylococcus aureus were found to be resistant to routinely used higher antibiotics. Using an agar incorporation technique the sensitivity of these strains to honey was tested by the method of minimum inhibitory concentration. All the tested strains of Staphylococcus aureus showed inhibition with honey at concentrations of 25 and 30%. The present study recommended that the multidrug-resistant Staphylococcus aureus infection particularly wound and burns honey may be useful for controlling infection.

Keyword: Methicillin-Sensitive Staphylococcus aureus (MSSA); Methicillin-Resistant Staphylococcus aureus (MRSA); Minimum Inhibitory Concentration (MIC); Honey; Wound infections.