

A LABORATORY SURVEY OF THE ANTIMICROBIAL PROPERTIES OF HONEY-CONTAINING DRESSINGS

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Aim: To investigate the antimicrobial properties of six wound dressings that contained honey.

Method: 2x2 cm samples of each of six honey containing dressings were applied to the surface of bioassay plates seeded with overnight broth cultures of bacteria. Each of the following organisms was tested: Staphylococcus aureus NCTC 6571, EMRSA-15 NCTC 13142 and a clinical isolate Pseudomonas aeruginosa. The plates were incubated at 37°C for 24 hours. Zones of inhibition were measured and corrected zone sizes calculated, the plates were prepared in duplicate on three separate occasions.

Results: Two of the dressings gave negligible zones of inhibition with each of the three test organisms. The remaining four dressings gave distinct zones of inhibition with all of the organisms, and staphylococci were found to be more sensitive to honey than the pseudomonads.

Discussion/Conclusion: The dressings that caused inhibition of the test organisms all contained manuka honey at relatively high concentrations. The dressings that did not give rise to zones of inhibition contained lower concentrations of honey of unspecified floral origin. The type and concentration of honey in wound dressings influences its efficacy in vitro.