Antimicrobial dressings testing - Low Adherent

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Introduction

- SMTL tested wound dressings containing antimicrobial agents submitted for the 2009/10 All-Wales NHS Wound Management Contract.
- A range of products were examined.
- Three test methods were used. This poster shows the results for Log Reduction by Shaking against low adherent dressings.

Methods

- Log Reduction Test by Shaking, using Simulated Wound Fluid, based upon a method described by Parsons et al [1].
- Dressings tested against clinical isolates of MRSA and P. aeruginosa from infected leg ulcers at the Princess of Wales Hospital, Bridgend.
- Simulated wound fluid (SWF) consisted of foetal calf serum and maximum recovery diluent.
- Aliquots transferred into neutraliser after 4 and 24 hours incubation at 35±2°C.
- Total viable counts performed using a standard plate count method.
- Log reduction calculated as the difference between the number of microorganisms in the initial inoculum and the SWF after 4 or 24 hours.

Discussion

- In antibiotic assay sensitivity testing, a 3-log reduction may be considered bactericidal.
- Bactigras showed no activity against P.aeruginosa.
- Mesitran showed no activity against MRSA or P. aeruginosa
- The differences in activity between the two honey dressings may be explained by the fact that Activon contains 100% medical grade Manuka honey whilst Mesitran contains 20% medical grade honey.

Conclusions

- Antimicrobial activity of honey dressings differs markedly
- Activon honey dressing demonstrated pronounced activity.
- The Mesitran honey mesh encouraged bacterial growth in this test.
- The traditional iodine dressings demonstrated activity against both species.

References


http://www.smtl.co.uk/ & http://www.medidex.com/ info@smtl.co.uk