

Activon® Tulle in the treatment & prevention of MRSA, an effective treatment for chronic wound infections

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Background

The emergence of drug resistant bacteria particularly MRSA has posed a great problem with the management of chronic wound infections.

Many studies (1-3) have demonstrated that honey has antibacterial activity in vitro, and a small number of clinical case studies have shown that application of honey to severely infected cutaneous wounds is capable of clearing infection from the wound and improving tissue healing. The osmotic effects and pH of honey also aid in its antibacterial actions. It is also known that honey is derived from particular floral sources in Australia and New Zealand (*Leptospermum* spp) have enhanced antibacterial activity, and this honey has been approved for marketing as therapeutic dressings.

Methods

We have been using Manuka honey tulle dressings over the last six months in our wound care clinic and on the wards. We present some of the successes we have had in treating recalcitrant surgical wounds, within the maxillofacial unit, which have proved resistant to antibiotic therapy. The honey impregnated dressing is applied directly on to the surface of the wound and is then covered in a second absorbent layer to contain the honey. Dressings are changed every two to three days.

Case 1



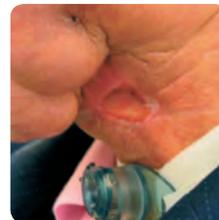
Before Manuka honey dressing



Two weeks after dressing

5 month old donor site wound MRSA positive and no signs of healing.

Case 2



Ulcerated area of neck wound present for four weeks



Progress after one week of Manuka honey dressing area now healed

Case 3



Radial forearm graft site



MRSA positive radial forearm flap donor site five weeks following Manuka honey dressing

Discussion

The management of chronic wounds in the maxillofacial clinic is often a frustrating and difficult task, especially those infected with MRSA and those that fail to respond to normal management. We have now over six months experience with honey dressings and these are now among our first line of treatment for early wound infections. No adverse reactions have been noted even in diabetic patients. Antibiotic resistance and immunocompromised patients can make for a poor end result. Manuka honey tulle as a wound dressing is useful in maintaining a moist wound environment and acts as an autolytic debriding agent where there has been wound breakdown and where necrotic tissue requires removal.

References

- (1) Lusby PE, Coombes A, Wilkinson JM. Honey: a potent agent for wound healing? *J Wound Ostomy Continence Nurse*. 2002 Nov;29(6):295-300.
- (2) Natarajan S, Williamson D, Grey J, Harding KG, Cooper RA. Healing of an MRSA-colonized, hydroxyurea-induced leg ulcer with honey. *J Dermatolog Treat*. 2001 Mar;12(1):33-6.
- (3) Cooper RA, Molan PC, Krishnamoorthy L, Harding KG. Manuka honey used to heal a recalcitrant surgical wound. *Eur J Clin Microbiol Infect Dis*. 2001 Oct;20(10):758-9.