

USE OF MEDIHONEY® WOUND GEL FOLLOWING MAJOR THERMAL INJURY



ST ANDREW'S CENTRE
for Plastic Surgery and Burns



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BACKGROUND

Active *Leptospermum* Honey (ALH) has been reported to have salutary effects in the management of both acute and chronic wounds. However, the use of ALH for the management of larger thermal injuries has been sparsely reported. MEDIHONEY® Wound Gel (Derma Sciences, Maidenhead UK) is a topical preparation of manuka honey which has antimicrobial properties, provides a barrier to wound pathogens and maintains a moist and slightly acidic wound environment, conducive to wound healing.

CASE STUDY

A 41 year old male sustained a 85% TBSA thermal burn: 40% deep dermal and 45% full thickness. Multiple theatre trips using auto and allograft in a sandwich grafting technique resulted in only 10% wound healing with a static wound bed. On day 60 post burn injury, 13 days after last set of “sandwich” grafts to abdomen and bilateral extremities, wound swabs from fragile, bleeding, malodorous graft sites demonstrated growth of VRE, *E. faecium* and *Candida*, while the patient exhibited signs of multi-organ dysfunction and sepsis requiring systemic antibiotics, steroids, TPN, and CVVHDF for support. Family was being prepared for his poor prognosis.



Pre-honey dressing



10 days later

METHOD

In an effort to decrease the wound bacterial burden and potential systemic seeding, the patient was bathed with antimicrobial soap and the wounds dressed with paraffin tulle gauze impregnated with MEDIHONEY® Wound Gel and secured with gauze and gamgee. This process was repeated every other day with reapplication of MEDIHONEY® Wound Gel.

RESULTS

Over the course of the next 10 days, the wounds improved, with decreased bleeding and developed healthy granulating tissue. In addition, the dressing regimen helped maintain normothermia. With the continuing supportive therapy, the patient improved sufficiently to undergo further skin grafting with successful wound closure and ultimately, recovery.

CONCLUSION

Although successful in the management of this patient, the use of ALH for the management of large burns requires further study. This centre has embarked on a 12 month observational study to gather additional clinical evidence.