



L-Mesitran® Product Information

Mechanics

Hydro is an antibacterial, hydro-active, low-adherence, honey-containing dressing for use on acute and chronic wounds. The honey-hydrogel pad donates moisture to re-hydrate dry tissue and is also able to absorb low to high levels of exudate to help maintain a moist environment conducive to healing. The film backing provides the dressing with bacterial barrier properties. Hydro kills most bacteria, including stant strains e.g. MRSA. It also prevents infection and quickly neutralizes wound odours. The product cleanses/debrides the wound, creates a moist wound healing environment, and optimizes wound healing. It draws the fluid from surrounding tissues, facilitates autolysis of necrotic and devitalised material, promotes epithelization, and reduces scarring. The gel does not adhere to the wound. L-Mesitran has no influence on blood glucose levels. The product has a cooling effect, which is helpful (with e.g. burns).



Ingredients

- o 30% Medical Grade Honey
- Acrylic polymer gel
- o Water with a polyurethane film backing

Indications

- o Chronic wounds
- o Pressure ulcers
- o Superficial and partial thickness burns
- o Venous, arterial and diabetic ulcers
- Fungating wounds
- Acute wounds
- o Donor sites
- Surgical wounds
- o Cuts and abrasions

Contra-indications

Do not use on individuals with a known sensitivity to the dressing or its components. The dressing should not be used on: full thickness burns, deep, narrow cavities or sinuses.

Technical information

Film carrier: polyurethane film Gel:

polymeric hydrogel infused with MGH Shelf life:

CE classification: class IIb

Store at room temperature 5°-25°C/41°-77°F. Store dry. Do not freeze. The storage conditions are detailed on the product cartons and tubes as symbols. Is sterile until opening.

Size	Box (primary	Box/	Order code	Reference
	packaging)	case		
10x10cm	10 pcs	20	MES-H1010	412.10





L-Mesitran® Product Information

Case: Burn

An adult male (42 years), with an accidental burn sustained to the right upper extremity, including hand after falling into a fire drum with hot coals.

Methods

Tangential excision or skin grafting was not indicated and the wounds were initially dressed at the hospital with silver impregnated dressings before intentional conversion to L-Mesitran Hydro after hospital discharge. Before and after burn dressing treatment with the honey based dressings, and clinical outcome in this patient, are reflected in figure 1.

Results

Satisfactory wound healing and burn epithelialization was complete in sixty days, and the rehabilitation at home was successful and facilitated by strict sepsis surveillance and nutritional support. Both a positive subjective and objective end result or measured-outcome followed the use of the honey-based dressings of choice. Three month follow-up after the burn showed minimal depigmentation, hyperpigmentation and hyperplastic scar tissue resulting in no elbow, wrist or finger contractures.

References

- Boekema BK, Pool L et al. The effect of a honey-based gel and silver sulphadiazine on bacterial infections of in vitro burn wounds. Burns. 2013;39(4):754-759.
 Chatzoulis G, Chatzoulis K et al. Salvage of an infected titanium mesh in a large incisional
- Chatzoulis G, Chatzoulis K et al. Salvage of an infected titanium mesh in a large incisional ventralhernia using medicinal honey and vacuum-assisted closure: a case report and literature review. Hernia. 2012;16(4):475-479.
- 3. Smaropoulos E, Cremers NA. Medical grade honeyfor the treatment of pediatric abdominal wounds: aca caseeries. J Wound Care. 2020;29(2):94-99.
- 4. Smaropoulos E, Cremers NAJ. Treating severe wounds in pediatrics with medical grade honey: A case series. Clin Case Rep. 2020;8(3):469-476.
- 5. Smaropoulos E, Cremers NAJ. Medical grade honey for the treatment of extravasation-induced injuries in preterm neonates a case series. Advances iNeonatalal Care. 2020;in press.
- 6. Haynes SJ, Callaghan R. Properties of honey: its mode of action and clinical outcomes. Wounds UK.2011;7(1):50-57.
- 7. Mandel HH, Sutton GA et al. Intralesional application of medical grade honey improves healing of surgically treated lacerations in horses. Equine Vet J.2020;52(1):41-45.
- 8. Cremers N, Belas A et al. In vitro antimicrobial efficacy of two medical-grade honey formulations against common high-risk methicillin-resistant staphylococci and Pseudomonas spp. pathogens. Vet Dermatol.2020;31(2):90-96.
- 9. Hermanns R, Cremers NAJ et al. Sweet relief: determining the antimicrobial activity of medical grade honey against vaginal isolates of Candida Albicans. JFungi (Basel). 2019;5(3).
- 10. Oliveira AMP, Devesa JSP et al. In vitro efficacy of honey-based gel against canine clinical isolates of Staphylococcus pseudintermedius and Malasseziapachydermatis. Vet Dermatol. 2018;29(3):180-e165.
- 11. de Groot T, Janssen T et al. Antifungal activity of medical-grade honey formulation against CandidaAuris. J Fungi (Basel). 2021;7(1).
- 12. Holubová A, Chlupácová L et al. Medical-grade honey as an alternative treatment for antibiotics in non-healing wounds—a prospective case series. Antibiotics (Basel).
- 13. Naik PP, Mossialos D et al. Medical-grade honey outperforms conventional treatments for healing cold sores-a clinical study. Pharmaceuticals (Basel).2021;14(12).

Discussion

Burn surface wound healing was affected by secondary intention and the use of topical medicinal honey-based moist dressings, active movements of both extremity joints and hand to avoid contracture and stiffness. The application of L-Mesitran Hydro antibacterial barrier island dressings facilitated rapid burn wound re-epithelialization, curtailment of pain, and burn-associated sepsis at the skin denuded areas, without the need for other dressings. Application of L-Mesitran reduced the period of functional disability in this burn patient and the healing of the deep thermal burn was accomplished within 60 days. Patient satisfaction was expressed with a high level of burn wound healing and regained full functionality of the forearm and hand.







Figure 1. Wound healing progress.

- 14. Nair HKR, Tatavilis N et al. Medical-grade honey kills antibiotic-resistant bacteria and prevents amputation in diabetics with infected ulcers: A prospective case series. Antibiotics (Basel). 2020;9(9).

 15. Pleeging CCF, Coenye T et al. Synergistic antimi-microbial activity of supplemented medical-grade
- honey against Pseudomonas Aeruginosa biofilm formation and eradication. Antibiotics. 2020;9(12):866.

 16. Gustafsson K, Tatz AJ et al. Intra-incisional medical-grade honey decreases the prevalence of incisional infection in horses undergoing colic surgery: a prospective randomized controlled study. Equine Vet J. 2020.
- 17. Smaropoulos E, Cremers NAJ. The pro-healing effects of medical-grade honey are supported by a pediatric case series. Complement Ther Med. 2019;45:14-18.
- 18. Du Toit DF, Page BJ. An in vitro evaluation of the cell toxicity of honey and silver dressings. J WoundCare. 2009;18(9):383-389.
- 19. Postmes T, van den Bogaard AE et al. Honey for wounds, ulcers, and skin graft preservation. Lancet.1993;341(8847):756-757.
- 20. Rossiter K, Cooper AJ et al. Honey promotes an-angiogenic activity in the rat aortic ring assay. J WoundCare. 2010;19(10):440, 442-446.
 21. Nwabudike LC, Maruhashi E. Patient education, self-care and medical grade honey—managing a
- diabetic ulcer. Wounds International. 2017;8(4):40-43.

 22. Postmes T, van den Bogaard AE et al. The sterilization of honey with cobalt 60 gamma radiation: a study of honey spiked with spores of Clostridium Botulinumand Bacillus Subtilis. Experientia.
- 1995;51(9-10):986-989. 23. Postmes T. Speeding up the healing of burns with honey. Bee Products, edited by Mizrahi and
- LenskyPlenum Press, New York: 57-63. 1996:57-63.

 24. Hermanns R, Mateescu C et al. Defining the standards for medical grade honey. Journal of apicultural research. 2020;59(2):125-135.
- 25. Zbuchea A. Honey, Food and Medicine: Scientificrationale and practical efficiency in external administration of medicinal honey for wound healing. Journal of Agricultural Science and Technology B. 2017;7:206-219.