

Mechanics

L-Mesitran Soft, due to its strong osmotic activity, has proven antimicrobial efficacy, against even antibiotic-resistant strains, such as MRSA and biofilm (fig. 1). It also prevents infection and quickly neutralizes wound odours. L-Mesitran Soft is a primary wound dressing that can be covered with the most commonly used secondary dressings. The properties of the gel also help prevent the secondary dressing from adhering to the wound bed. L-Mesitran Soft has no influence on blood glucose levels and reduces pain. When the gel is in contact with the wound, fluid is drawn from the surrounding tissues through osmosis. By doing so, a moist wound healing environment is created. This environment stimulates the wound healing process: aids wound bed preparation by facilitating autolytic debridement of necrotic and other devitalised material and promotes better epithelial cell migration and reduces scarring.

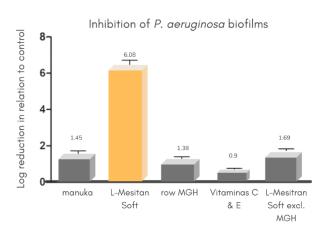


Figure 1. Synergistic activity of the L-Mesitran supplements

Technical information	
pH:	+/- 3-6
Shelf life:	3 years
CE classification:	class IIb

Storage precautions

Store at room temperature $5^{\circ}-25^{\circ}C/41^{\circ}$ - $77^{\circ}F$. The storage conditions are detailed on the product boxes and primary packaging as symbols.

Ingredients

- \circ 40% medical grade honey
- Hypoallergenic lanolin
- Propylene glycol
- PEG 4000
- Vitamin C
- Vitmain E

Indications

- Chronic wounds.
- Pressure ulcers (Stage I-IV).
- Venous stasis ulcers.
- Fungating wounds (to help deodorise and/or debride).
- Colonised acute wounds.
- Surgical wounds, post-operative wounds.
- Traumatic wounds (superficial wounds, cuts).
- \circ Burns, superficial and partial thickness burns

Contra-indications

Do not use the gel on patients who are known to be sensitive to it or any of its ingredients. No other contradictions are known to date

Size	Box (primary	Box/	Order	Reference
	packaging)	case	code	
0,9g	10 pcs (sachets)	100	LMS01S	201.10
15g	1 pc (tube)	14	LMS15	203.01
50g	1 pc (tube)	12	LMS50	205.01
250g	1 pc (jar)	30	LMS250J	207.01

L-Mesitran[®] Product Information

Case: Leg ulcer

A woman (57) with a general bad health condition and diabetes had an ulcer on her leg after a vein was removed for her bypass operation (fig. 2A). The wound was treated with povidone-iodine for a week in the IC-unit.

Methods

After cleaning the wound with saline, L-Mesitran Soft was applied in a thin layer. This was done by the home care nurse under the supervision of the GP.

Results

The dressing created a moist wound environment. The necrotic and infected wound (fig. 2A) debrided fast and after appr. 4 weeks a clean and granulating wound bed was observed (fig. 2B). The wound was epithelised during the next three weeks and after 7 weeks the wound was fully healed with little to no scarring (fig. 2C). The patient had no painful sensation during wear time or at dressing changes. No maceration was observed and there were no adverse events reported. In total, roughly 150g of L-Mesitran Soft was used and the wound healed.

References

- 1. 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. 2. Chatzoulis G, Chatzoulis K et al. Salvage of an infected titanium mesh in a large incisional
- ventral hernia 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 honey for the treatment of pediatric abdominal wounds case series. 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 in Neonatal 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 a 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). 2021;10(8):918.
- 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

The debridement of the wounds was fast, which is one of the key features of honey-based products. This evaluation shows that this product can effectively combat infections and stimulate granulation and epithelisation. The wound healed completely without adverse effects and virtually no scarring.



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Figure 2. Wound progression in time.

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 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 -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.