

Bee product apiderm royal gel® in pressure injuries and wound care - case report

Abstract

Described are two cases of wound healing using gel composed of different types of bee pollen, water soluble propolis and different types of honey. Case I describes deep decubitus wound of heel in 91 years old patient. The bee product Apiderm royal gel® applied directly to the open wound was extremely effective in its healing. Already in 13 days the wound was almost closed and regenerative tissue completely developed 14 days later. The same product used for healing three years old mechanical wound (Case II) was the same successful. Previous surgical or antibiotic treatment did not help at all. After the bee product was applied the wound start healing immediately, and 11 days later it was almost closed with healing process completed seven days later.

Keywords: pressure injuries, wound, healing, bee product

Volume 3 Issue 2 - 2017

Bratko Filipic, Hrvoje Mazija
CIETO, Croatia

Correspondence: Bratko Filipic, CIETO, Koledinečka 3, 10040 Zagreb, Croatia, Tel 0038651847948, Email Bratko.Filipic@gmail.com

Received: May 20, 2017 | **Published:** June 16, 2017

Introduction

Bee products are known for thousands years for its beneficial effect on wound healing process.^{1,2} Its effectiveness is partly explained only in recent years explaining the multiple bioactivities involved in healing process. It seems that the most important activity of bee products is acidification that promotes healing of deep wounds.³ Similar report was given by M phande et al.,⁴ who reported on positive effects of honey and sugar dressing on wound healing. Part of the bee product activity in healing process could be addressed to its strong antibacterial activity directed even to multiresistant strains of bacteria.⁵ Honey was also used in treatment of decubitus ulcers.⁶ It is obvious that different bee products can act very positive to the healing process in both mechanical wounds as well as to the pressure wounds.⁷

Pressure injuries (decubitus) represent a significant problem in patient forced to lay in hospitals during or after surgical intervention or in phase of convalescence. Specific body region exposed are those where bones are close to the skin and support the organism constitution (heels, sacral region, shoulders), and are specific problem in elderly people. Wounds are very often difficult to heal if are infected and deep in muscular or connectivetissue, appearing after the skin is already destructed. Almost 83% to 87% of decubiti lesion are of hospital origin, and in stage II and III the prognosis is negative leading to chronic invalidities or finally in death of the patient. Treatment of wounds is difficult and time consuming with minimal improvement. It is related to complex mechanical treatment of wounds using air fluidized bed, hydrocolloid dressing, radiant heat dressing, electrical stimulation, electromagnetic therapy, negative pressure therapy, light therapy, laser therapy and much more as it is described in clinical guidelines.⁸

Case presentation

In this respect the use of Apiderm royal gel represents a novel approach. The gel is composed of different types of bee pollen, water soluble propolis of different types and mixture of different types of honey. The process of Apiderm royal gel® production includes thermal treatment of some of ingredients which is intellectually protected property.

Case I

Female patient aged 91 year because of improper treatment (not turning every two hours) gradually after one month developed decubitus wounds in both heels. Surgical treatment did not lead to the improvement of the lesion (Figure 1).

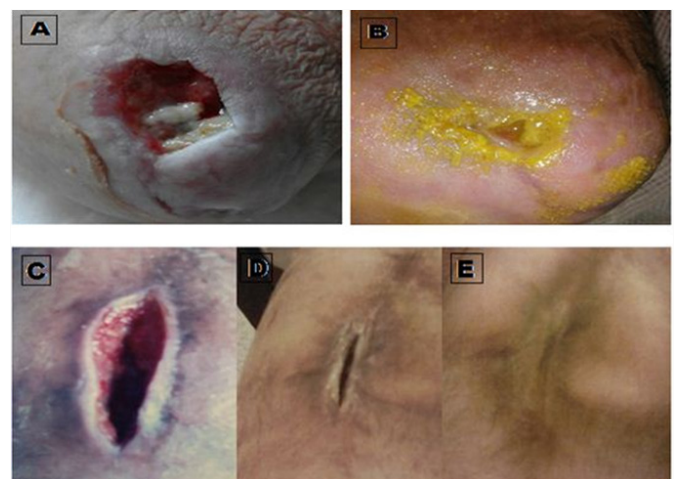


Figure 1 Before use of the gel the wound was 6cm deep and 5cm in diameter

- In 13 days the size was reduced to on third and 14 days later the wound was only superficial.
- The wound located below the knee was treated during a period of three years (different antibiotics, vacuum treatment, and transplantation of the skin) without any success.
- Apiderm royal gel® was applied directly to the open wound repeatedly every 12 hours with an unexpected effect. The wound start healing immediately, and 11 days later it was almost closed.
- With healing process completed seven days later (E).

Case II

Male 55 years old was wounded in severe car accident.

Discussion

Efforts to improve the healing process of decubitus or mechanical wounds is a permanent duty of specialist in hospitals and relevant institution trying to reduce suffering of patients and also of those responsible for the economic cost of treatment of it. Actual approaches in that sense are directed to the mechanical support of circulation and using of different tools to alleviate the suffer of patient by surgical treatment, and use of antimicrobial substances.⁸ The bee product is Apiderm royal gel® acts directly to the wound healing process regard less of it's ethnology acting at the same to the decubitus wound as to the mechanical once. It acts even in necrotic milieu as it is described by Subrahmanyam.⁶ It could be mentioned that the activity of Apiderm royal gel® is also antimicrobial one as described for different bee products.^{9,10}

Acknowledgements

The presented "Case report" was supported by CRODUX, 10000 Zagreb, Croatia.

Conflict of interest

The author declares no conflict of interest.

References

1. Molan PC. The evidence and the rationale for the use of honey as a wound dressing. *Wound Pract Res.* 2011;19(4):204–221.
2. Molan PC. Honey: A Biologic Wound Dressing. *Wounds.* 2015;27(6):141–151.
3. Kaufman T, Eichenlaub EH, Angel MF, et al. Topical acidification promotes healing of experimental deep partial thickness skin burns: a randomised double-blind preliminary study. *Burns Incl Therm Inj.* 1985;12(2):84–90.
4. Mphande AN, Killowe C, Phalira S, et al. Effects of honey and sugar dressings on wound healing. *J Wound Care.* 2007;16(7):317–319.
5. George NM, Cutting KF. Antibacterial honey: *in-vitro* activity against clinical isolates of MRSA, VRE, and other multiresistant gram negative organisms Including *Pseudomonas aeruginosa*. *Wounds.* 2007;19(9):231–236.
6. Subrahmanyam M, Ugane SP. Honey dressing beneficial in treatment of Fournier's gangrene. *Indian J Surg.* 2004;66(2):75–77.
7. Molan PC. Re-introducing honey in the management of wounds and ulcers – theory and practice. *Ostomy Wound Manage.* 2002;48(11):28–40.
8. Qaseem A, Wilt TJ, Mclean RM, et al. Noninvasive treatments for acute, sub acute and chronic low back pain: A clinical practice guideline from the American College of Physicians. *Ann Intern Med.* 2017;166(7):514–530.
9. Jull AB, Rodgers A, Walker N. Honey as a topical treatment for wounds. *Cochrane Database System Rev.* 2008;8(4):CD005083.
10. Van der Weyden EA. The use of honey for the treatment of two patients with pressure ulcers. *Br J Community Nurs.* 2003;8(12):14–20.