

The Voice of Experience: Wound Management using Active *Leptospermum* Honey Impregnated Calcium Alginate Dressings*

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GOALS AND OBJECTIVES:

The goal of this investigation was to determine the optimal use of a new Active *Leptospermum* Honey Impregnated Calcium Alginate Dressing (HICAD)* and evaluate performance of the dressing in the clinical and home care environment.

METHODS:

Several individuals with non-healing wounds of various etiologies received treatment with Active *Leptospermum* HICADs. The wounds were cleansed with normal saline, a Active *Leptospermum* HICAD* was applied directly to the wound and changed twice weekly.

DISCUSSION / CONCLUSION:

Non-healing wounds are frustrating and costly for patients and clinicians. In this series of cases an alginate dressing impregnated with Active *Leptospermum* honey significantly improved the wound bed and contributed to cost effective healing when other modalities had failed. In one circumstance excess exudates created the need for frequent observation, use of an absorbent cover dressing and periwound protection to prevent maceration.

PATIENT 1

A 65 y/o female with Type 2 DM, PAD, and severe rheumatoid disease on steroid therapy initially presented with a 5-month, non-healing trans metatarsal amputation site in August of 2006. Initial treatment efforts were directed toward achieving a clean and granulating wound bed. Subsequent treatment over a one year time period included the following: bioengineered tissue (times 5), porcine matrix dressings, collagen dressings, and periodic antimicrobial dressings. Significant, although slow, decrease in size was noted over one year but all attempts at final closure were unsuccessful. Active *Leptospermum* HICADs were initiated 2X/week with edema management. Wound healing was achieved in 63 days.



8/21/06
Trans metatarsal amputation site with slough



10/02/06
6 weeks: slough debrided



11/12/07
At 1 year: the wound is smaller. All attempts at final closure unsuccessful



11/19/07
Active *Leptospermum* HICAD initiated



1/07/08
Dressing change performed every three days, size diminished



1/21/08
Week 8: Complete healing achieved

PATIENT 2

A 50 y/o male plumber with rheumatoid arthritis, hypertension, and healed ulcerations related to venous insufficiency presented with a 5 month history of malodorous chemical burns (trousers soaked with drain cleaner) on the left lower extremity. Previous treatment with silver sulfadiazine cream and antibiotic ointment covered with dry dressings was unsuccessful. Active *Leptospermum* HICADs were initiated 2X/week. By week 2 odor was eliminated, slough was cleared, epithelial growth was evident and the periwound skin was intact. Honey was discontinued due to persistent large amount of exudate.



11/08/07
Ultrasound debridement performed. Silver hydrofiber absorbent dressing applied. Surface area 699.44 sq cm.



11/13/07
Active *Leptospermum* HICADs applied, covered with ABD pads, gauze and multilayer compression



11/16/07
Dressings and multilayer bandage are fully saturated. The dressings were removed and ultrasonic debridement was performed. A clean wound bed, epithelial bridging and slight maceration was noted. Periwound protection was applied and the wound was redressed



11/20/07
Exudate diminished but still significant. Periwound skin less macerated. Epithelialization continued



11/29/07
HICAD was discontinued due to quantity and character of exudate



11/29/07
Wound appears much cleaner, the periwound skin is intact, epithelial growth is evident and there is no odor. Surface area 413.7 sq cm (decreased from 699.44)

PATIENT 3

A 83 y/o female with rheumatoid arthritis, DVT on chronic Coumadin therapy, osteoporosis, and hypertension, presented with a chronic pressure ulcer which had been non-healing for 10 months. The patient was frustrated with various treatments which failed to heal the wound. She verbalized satisfaction with the use and performance of the Active *Leptospermum* HICAD for every other day dressing changes.



2/13/08
1.0 cm. X 3.4cm X 0.9cm (2.67sq cm). Debridement performed and silver hydrofiber dressing was initiated



3/26/08
0.7cm X 3.0 cm X 0.6 cm (1.65 sq cm). 38.2% improvement with 6 weeks of silver hydrofiber. Wound debrided and HICAD initiated



3/26/08
Application of cover dressing over HICAD packing



3/26/08
HICAD in place beneath cover dressing.



4/23/08
0.7 cm X 1.8 cm X 0.3 cm. (0.99 cm sq) Minor surface debridement performed and HICAD continued



5/14/08
0.4 cm X 1.8cm X 0.3 cm (0.56 cm sq) 60.06% improvement with 6 weeks of HICAD

References:
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*MEDIHONEY™ Absorbent Calcium Alginate Dressing with *Leptospermum* Honey, Derma Sciences, Inc., Princeton, New Jersey. Funding for costs associated with this poster provided by Derma Sciences. The information in this poster concerns a use that has not been approved or cleared by the US Food and Drug Administration.