Comparing Efficacy of Active *Leptospermum* Honey

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PURPOSE

In an effort to contain costs and provide effective wound care, it was apparent that a trial of debridement products was needed to evaluate efficacy and efficiency. The purpose of this presentation is to illustrate the evaluated effectiveness of an inexpensive debridement product, Active *Leptospermum* Honey* (ALH) on full thickness wounds.

OBJECTIVE

The goal is to determine whether or not the rate of time in which an inexpensive debridement product will debride full thickness wounds will be within similar or less time as the present enzymatic debridement product.

METHODOLOGY

There were a total of 39 patients in the span of a 6-month trial. 90% of the patients in the trial had full thickness wounds, the remaining 10% were partial thickness. Types of wounds included 27 pressure ulcers, 6 disease related, 2 medical device related, 3 traumatic injuries and 1 surgical wound.

CASE STUDY #1:
63-year old male with history of hypertension, admitted with septic shock secondary to *Acinetobacter* pneumonia, complicated by *Salmonella* bacteremia and *Clostridium difficile* colitis. Patient developed a stage III pressure ulcer to the occipital area. **Outcome:** Resolved within 9 days.

CASE STUDY #2:
54-year old female with history of coronary arterial disease, peripheral arterial disease, diabetes, hypertension, congestive heart failure and left atrium deviation. Patient developed a necrotic heel ulcer. **Outcome:** MDs were concerned with sharp debridement on this patient due to the history of diabetes and poor perfusion. The ALH gave an effective alternative. Eschar debrided revealing granulation tissue within 23 days.

CASE STUDY #3:
50-year male old history of congestive heart failure, methamphetamine abuse, gastrointestinal bleeding and deep vein thrombosis. Developed severe untreated ulcerations on feet and legs over 3 months prior to hospitalization. **Outcome:** MDs were considering amputation of feet. However, after ALH treatments, MDs determined *amputation was no longer necessary* due to revitalized granulation tissue with no signs of osteomyelitis.

CASE STUDY #4:
51-year old male paraplegic with chronic sacral and ischial pressure ulcers previously treated with surgical muscle flaps. History of osteomyelitis and is receiving long-term antibiotics. **Outcome:** The slough debrided revealing granulation tissue despite this patient's comorbidities of sepsis with poor nutrition, noncompliance with medication and DNR status.

RESULTS

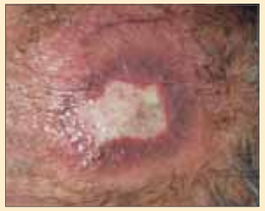
Thirty-nine patients started in the trial; however, 14 could be tracked due to long hospital stay. All 14 patients' wounds showed improvement or resolved with ALH. Due to high osmotic properties of ALH, wounds tended to be highly exudative and patients required daily dressing changes in the beginning stages of application. As necrotic tissue was autolytically debrided, less ALH was usually required, thereby decreasing dressing changes to every 3 to 5 days.

CONCLUSION

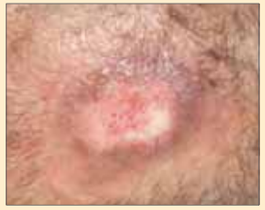
ALH appears to be an effective autolytic debrider with response rate within similar to less time of present enzymatic debridement product. ALH averaged approximately 11 days after initial application to show improved results. ALH proved to be significantly cost effective on candidates during our trial.

*MEDIHONEY® Active *Leptospermum* Honey Dressing, Derma Sciences, Inc., Princeton, New Jersey.

CASE 1

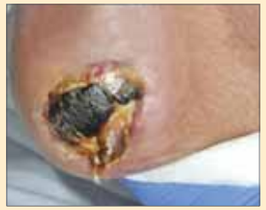


08/30/11
Occipital SDTI demarcated to a stage III pressure ulcer measuring 1.5 x 2cm with 100% adherent slough.

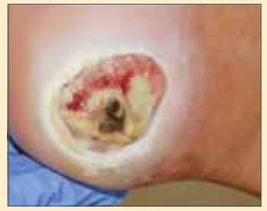


09/08/11
Resolving stage III pressure ulcer measuring 1.2 x 2cm with 95% granulation tissue. Patient was discharged home on 09/09/11.

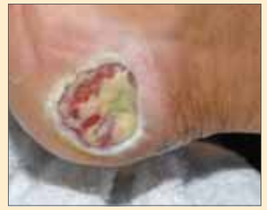
CASE 2



06/22/11
Diabetic foot ulcer measuring 3 x 3cm with 100% necrotic tissue. Silver sulfadiazine cream was applied as the first topical treatment on admission. ALH started on 06/29/11.



07/01/11
2 days after ALH initiated, the wound is 3 x 3 cm, but now has yellow stringy slough and granulation tissue.



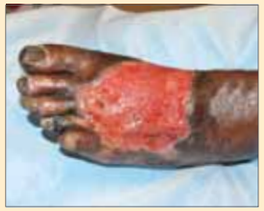
07/08/11
After 4 applications of ALH, the wound is 3 x 3cm with 30% yellow stringy slough and granulation tissue.

07/15/11
After 2 more applications of ALH, the wound measured 2.5 x 2cm and had 20% yellow stringy slough with 80% granulation tissue. Patient was discharged on 07/18/11.

CASE 3

05/05/11
Venous insufficiency ulcers. Patient was hospitalized from 04/28/11 – 05/06/11, and received two applications of ALH on 04/28/11 & 05/05/11. Patient was discharged on 05/06/11.

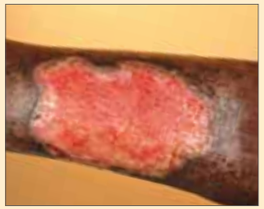
05/27/11
Patient was readmitted and ALH restarted.



06/17/11
After 20 days of ALH treatments, patient was discharged 06/24/11, before complete wound closure.

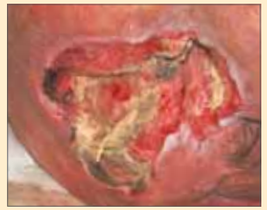
05/05/11
Left posterior leg ulcer.

05/12/11
After 7 days of ALH treatment.

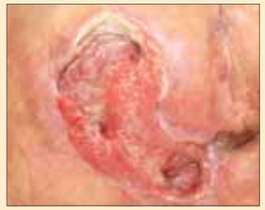


06/17/11
After 35 days of ALH treatments.

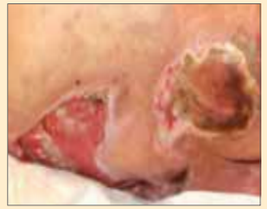
CASE 4



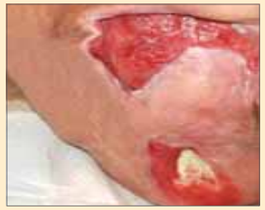
05/13/11
Sacrum pressure ulcer measuring 10 x 12 x 5cm with undermining. ALH started on 05/18/12,



06/03/11
16 days after starting ALH.



08/01/11
Patient was discharged on 06/20/11 then readmitted 07/30/11 with this right ishial ulcer measuring 10 x 8 x 1cm. I n addition to the previously ALH treated sacrum, 7 x 12 x 4cm. ALH restarted 08/03/12 to both areas.



09/09/11
37 days after restarting ALH. Sacrum (superior) with 100% beefy red hypergranulation tissue; right ischium (inferior) with beefy red 80% hypergranulation tissue and 20% adherent yellow slough.