Treating Pressure Ulcers: When, How and What to expect when using MEDIHONEY® and the primary topical intervention

Presenter: Peg Manochi, RN, BSN, WCC, CWCN
Clinical Field Specialist
Derma Sciences, Clinical Affairs

Access this presentation and more information on MEDIHONEY® products at www.dermasciences.com
Agenda

• Review of relevant guidelines and literature regarding Pressure Ulcers (PU) and Honey
• Why MEDIHONEY®?
• MEDIHONEY® PU Case Review
• Application Tips & Pointers
• Q&A
Pg 43: Debridement
Consider the use of medical-grade honey in heavily contaminated pressure ulcers until definitive debridement is accomplished.

Pg 45: Treatment
Consider using dressings impregnated with medical-grade honey for the treatment of Category/Stage II and III pressure ulcers.
Cochrane Systematic Review – Full Thickness Pressure Ulcer

RCT - Weheida et al.:
Faster healing vs. saline gauze ($p < 0.05$)$^2$

– 20 patients with a PU in each group
– All 4 full-thickness PU were in honey group

OVER 160 pieces of evidence showing MEDIHONEY® is an effective product for promoting the removal of necrotic tissue and healing.³

No other honey brand has this many pieces of evidence

³. MEDIHONEY Reference List. Derma Sciences.
WHY MEDIHONEY®

• Derived from the pollen and nectar of the *Leptospermum* species of plant in New Zealand

• Rigorous sourcing and processing controls; sterile

• Unique among honey/even Manuka honey
  • Effective even in the presence of wound fluid

• Supported by a large body of clinical evidence\(^3\)

• Two key mechanisms of action support autolytic debridement and healing allowing the body to get into its zone of reparative competence: Low pH and High Osmolarity

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Pressure Ulcer Study reporting on pH

Tsakada et al.: The more advanced the stage the more alkaline the pH

Stage I- pH 5.7 (+/- 0.5)
Stage II- pH 6.9 (+/- 1.0)
Stage III- pH 7.6 (+/- 0.2)

Mechanism of Action - Low pH

• pH of chronic wounds range between 7.15 and 8.95
• MEDIHONEY® naturally low pH helps to lower the pH of the wound environment
• Show to have wound healing benefits

Mechanism of Action: High Osmolarity

Instinctive protection process
- Flap Wings
- Remove water, a potential element that could contain bacteria
- Results – Dehydrated honey

Dehydrated Honey wants to rehydrate itself = Creates an Osmotic Engine
Mechanism of Action: High Osmolarity

Like an osmotic engine, MEDIHONEY® spontaneously draws and pulls fluid from deeper tissue to the wound surface.

Bathes the wound and works with the body’s natural processes to aid the removal of necrotic tissue\textsuperscript{9,10}

\textsuperscript{9} Acton C, Dunwoody G. The use of medical grade honey in clinical practice. \textit{British J Nursing} 2008;17(20): S38-S44.
\textsuperscript{10} Chaiken, N. Pressure ulceration and the use of Active Leptospermum honey for debridement and healing. \textit{Ostomy Wound Management} 2010;56(5), 12-14.
Different Configurations to assist Wound Bed Preparation & Healing

- **MEDIHONEY® Paste**
- **MEDIHONEY® Gel**
- **MEDIHONEY® HCS**
- **MEDIHONEY® Honeycolloid**
- **MEDIHONEY® Calcium Alginate**

Lighter Exudate

Heavy Exudate
Case Review
Case 1 – 4 Month Untreated Stage IV Pressure Ulcer

DAY 1

• 65 y/o with Multiple Myeloma s/p hip fracture with Stage 4 pressure ulcer several months old.
• Initiated MEDIHONEY® Calcium Alginate with clinical objective of removing necrotic tissue
Case 1 – 4 Month Untreated Stage IV Pressure Ulcer

DAY 16

• Necrotic tissue softened and was partially sharp debrided at the bedside 2/15/10.
• Continued MEDIHONEY® Calcium Alginate with objective of healing
Case 1 – 4 Month, Untreated Stage IV Pressure Ulcer

Summary

- Clinical objective of debridement met
- Sharp debridement may be combined with MEDIHONEY® treatment per clinical judgment
- Healing on track - last image shows continued wound healing advancement one month later in a LTAC facility

Poster presentation by: Cynthia Bridgman BSN, RN, CWOCN and Carol Hall BSN, RN, CWOCN, CFCN, Southwestern Medical Center.
Case 2 – Immune Compromised Patient in Acute facility with Full Thickness PU

DAY 1

- 59 y/o White male.
- Hospitalization for pneumonia with respiratory failure on ventilator.
- Developed a full thickness PU over the coccyx while in ICU.
- Wound present for 1 month. Patient reported excruciating pain with sitting. He was being treated with saline wet to dry dressings.
- 90% densely adhered slough. Change treatment to daily dressing changes with MEDIHONEY® gel covered with gauze. Started air filled cushion.

Wound Measurement
3 cm x 1.5 cm x 0.2 cm
Case 2 – Immune Compromised Patient in Acute facility with Full Thickness PU

DAY 14

- Significant reduction slough, wound edge advancement
- Pain score decreased from 6/10 to 4/10 in 1 week and to 0/10 at the time of this visit.
- Serial sharp debridement were included in treatment for first 3 weeks.
Case 2 – Immune Compromised Patient in Acute facility with Full Thickness PU

Summary

- Combination of MEDIHONEY® gel and sharp debridement as needed
- Patient able to return to daily activities as wound progressed
- Wound closed within 2 months

Poster presentation by: Christine T. Berke, MSN, APRN-NP, CWOCN, ANP-BC, Nebraska Medical Center, Center for Wound Healing, Omaha, NE
Case 3 – Suspected Deep Tissue Injury in LTC Facility

DAY 1

Wound measurement:
10 cm² x 9.5 cm²

• Deep Tissue suspected upon admission and skin assessment was performed at long term care facility
• Patient had multiple co-morbidities
• Tissue evolved into a black eschar
• Initiated daily treatment with MEDIHONEY® Calcium Alginate
Case 3 – Suspected Deep Tissue Injury in LTC Facility

DAY 21

Wound measurement:
10.0 cm² x 9.5 cm² x 1.6 cm²

- Within three weeks the eschar was removed
- Base of the wound now covered with thick adherent yellow and tan slough.
- Patient experienced frequent episodes of incontinence.
- Dressing changes daily or as needed due to soiling.

Poster presented by: Mary Webb, RN, BSN, MA, CIC, Infection Control Practitioner, Wound Care. San Mateo Medical Center, San Mateo County, San Mateo, CA
Case 3 – Suspected Deep Tissue Injury in LTC Facility

Month 4

Wound measurement: 4.5 cm² x 4.7 cm²

- The wound remained infection free and the size decreased despite multiple co-morbid factors
- Unfortunately, the patient was lost to follow-up due to a medical emergency.

Poster presented by: Mary Webb, RN, BSN, MA, CIC, Infection Control Practitioner, Wound Care. San Mateo Medical Center, San Mateo County, San Mateo, CA
Summary

• Case demonstrates autolytic debridement and healing with MEDIHONEY® Calcium Alginate in a DTI

Poster presented by: Mary Webb, RN, BSN, MA, CIC, Infection Control Practitioner, Wound Care. San Mateo Medical Center, San Mateo County, San Mateo, CA
Case 4 – Stage IV PU requiring non-surgical debridement

Day 1

Wound measurement: 8.0 cm x 10.0 cm x 1.0 cm

- 56 year-old female, history of abdominal compartment syndrome and multiple co-morbidities. Patient reported extreme pain.
- Deemed not a candidate for surgical debridement - Collagenase applied for 3 weeks; however, progress to debridement was slow.
- On 4/10/2009, MEDIHONEY® Paste was initiated and covered with an absorbent calcium alginate dressing daily.
- Minimal sharp debridement was performed in the acute setting as needed to remove loosened, necrotic slough tissue
Week 9

- Slough removed through autolytic debridement with MEIDHONEY®
- Healthy granulation tissue is apparent with a small amount of exposed fascia.
- Significant reduction in wound size, decreased exudate, and peri-wound erythema.
- Patient’s self-report of pain scores was gradually improving.

Wound measurement: 6.0 cm x 8.0 cm x 1.0 cm

Poster presentation by: Nancy Chaiken, ANP-C, CWOCN, Swedish Covenant Hospital, Chicago, IL
Case 4 – Stage IV PU requiring non-surgical debridement

Summary

Week 1

Week 9

Week 16

Complete healing was achieved with only small scab present

Poster presentation by: Nancy Chaiken, ANP-C, CWOCN, Swedish Covenant Hospital, Chicago, IL
When and What to Expect Upon Application to a Pressure Ulcer

When/What Pressure Ulcer stages:
  • All stages (superficial to full thickness)

What to Expect:
  • Osmotic engine = Increased exudate
  • Daily dressing change initially, reduce once exudate decreases

Contraindications:
  • Known allergy or hypersensitivity to honey or alginate products (only when using Calcium Alginate)
Application Tips & Pointers

Case Example:
• Sacral Pressure Ulcer
• Tunneling, Undermining, Depth
• Products used:
  – MEDIHONEY® Paste – For good flow into tunnels
  – MEDIHONEY® Calcium Alginate – For deep wounds, for exudate absorption
  – BIOGUARD® Packing Strip - Assist intimate contact of MEDIHONEY® in tunneled wounds
  – XTRASORB® Foam Cover Dressing – Absorption, locks exudate away
Questions?

Peg Manochi, RN, BSN, WCC, CWCN
Clinical Field Specialist
Derma Sciences
Email: clinaffairs@dermasciences.com