The role of MEDIHONEY® in treating acute and chronic wounds of our nation’s military

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Agenda

• My clinical practice
• Why MEDIHONEY®? What can it do?
• A Review of Cases
• Impact on my practice
• Tips & Pointers
• Q&A
My Clinical Focus

- War Wounded who served in Iraq and Afghanistan
- Treat many dehisced incisions, partial take of split-thickness skin grafts, abscesses, donor sites
- Also, treat retirees, dependents
- Age range- 26 weeks- 100+ yrs old
- Acute and chronic wounds
MEDIHONEY®
Promoting Autolytic Debridement through to Healing

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

• Unique among honey – maintains its effectiveness even in the presence of wound fluid

• Shown in randomized controlled trial where the mean healing time was significantly faster for wounds treated with MEDIHONEY® impregnated dressings when compared to conventional dressings\(^1\)

• Two key mechanisms of action create an optimal environment for wound healing – High Osmolarity and Low pH

High Osmolarity

MEDIHONEY®’s high osmotic potential draws fluid from deeper tissue to the wound surface.

Works with the body’s natural processes to promote autolytic debridement to cleanse debris and necrotic tissue from the wound.
Wound healing favors an acidic environment

MEDIHONEY® pH 3.5-4.5

Neutral

Chronic wounds have an elevated alkaline pH (between 7.15- 8.9)

The low pH of MEDIHONEY® (3.5-4.5) helps to lower the pH within the wound environment\textsuperscript{2,3}, which has been shown to have wound healing benefits.\textsuperscript{4}

Two Mechanism of Action Promoting Autolytic Debridement

- Slough, eschar, and elevated pH
- High osmotic pull bathes wound
  Low pH impacts wound bed
- Non-viable tissue is removed

Baseline  Clean Wound Bed
Case Review
Case 1 – Central Necrosis in Juncture of Incision

- 26 yo USA SGT
- Right AKA- tight closure- central necrosis at juncture of incisions
- MIST ultrasound and MEDIHONEY® Calcium alginate daily
Day 1

- Wound bed completely covered by eschar and sough
- Pt. does not need to return to OR
- Pt. cannot proceed to prosthetic fitting for R leg
Case 1 – Central Necrosis in Juncture of Incision

Day 14

- Eschar liquefied and removed; Small amount of slough remains
- Wound contracting, continued treatment plan of MEDIHONEY® 3-5 times a week
Case 1 – Central Necrosis in Juncture of Incision

Day 40

- Wound nearly closed
- Proceeded with socket fitting and amputee rehab
Case 1 – Central Necrosis in Juncture of Incision
Case 2 – Dehisced Wound Following Surgery

- 67 yo female with Stage III ovarian cancer
- S/P TAH-BSO
- On chemo
- Taking oral hydromorphone and diazepam for pain control
- Open abdominal wound after laparotomy- on NPWT
Case 2 – Dehisced Wound Following Surgery

- Initial presentation
- 5 days post surgery with NPWT in place
Wound Management:

– Debridement
  • MIST ultrasound
  • MEDIHONEY® Calcium alginate/bordered foam
– Pain control
  • MIST ultrasound therapy
  • Pre-med 1 h prior to wound care with oral meds
– Infection risk
  • Immunosuppressed

Case 2 – Dehisced Wound Following Surgery
Case 2 – Dehisced Wound Following Surgery

Day 21

- MEDIHONEY® helped to clean up the wound bed
- Proceeded to put pt. back on NPWT
Case 2 – Dehisced Wound Following Surgery

Wound Management, Part II

- Time for NPWT again
- Current pain regimen- NOT effective in controlling her pain during dressing changes
- Added Fentanyl oralets 200 mcg with each dressing change IN ADDITION to her regularly scheduled meds
- Use of contact layer between NPWT sponge and wound bed
Case 2 – Dehisced Wound Following Surgery

Healed!

• Cont. on fentanyl for approx 4-6 weeks with NPWT changes
• Was able to stop them for about 1 month prior to complete closure
• 1 year later: wound still healed, cancer re-occurred
Case 2 – Dehisced Wound Following Surgery

Day 1
• MEDIHONEY® Calcium Alginate to clean up wound

Day 21
• Clean wound bed
• NPWT initiated

4 Months later
• Healed
Case 3 – Dehiscence of Transhumeral Amputation Closure

32yo M s/p dismounted IED blast

Triple amputation, polymicrobial wound infection

- RUE s/p traumatic transhumeral amputation with multiple attempts at closure.
- S/P neurectomy, incision healing by secondary intention
Case 3 – Dehiscence of Transhumeral Amputation Closure

L THA wound

- Wound bed 70% slough, 30% granulation
- MEDIHONEY® Calcium Alginate

Day 1
Case 3 – Dehiscence of Transhumeral Amputation Closure

Rapid improvement

- After 1 week of MEDIHONEY® + Mepilex® dressings changed daily
- Fully granulated wound bed
- Rapid epithelialization at wound edges
Case 3 – Dehiscence of Transhumeral Amputation Closure

Day 14

Healed

• Arm is now ready to be fitted for prosthesis
Case 3 – Dehiscence of Transhumeral Amputation Closure

Day 1

Day 7

Day 14
Case 4 – Dehiscent Faciotomy Wound

Day 1

- 26 yo 4th year medical student
- Had 4 compartment fasciotomy for exercise induced compartment syndrome
- Developed cellulitis 1 month postop at medial calf incision
- Dehisced in 3 areas
- MEDIHONEY® Paste and foam
Case 4 – Dehiscent Faciotomy Wound

Day 15

- Minimal adherent slough
- Edges closing in
Case 4 – Dehiscent Faciotomy Wound

Day 30

• Smaller wounds healed
• Larger wound nearly closed
Case 4 – Dehiscent Faciotomy Wound

Day 1

Day 15

Day 30
Case 5 – Left Lower Leg Heterotopic Ossification (Bone growth through tissue)

- 25 yo USA LT- extensive skin grafts to posterior LLE
- Severe heterotopic ossification- to be resected soon
- Known colonization issues
- On Juven and Doxycycline
- Exfix at ankle
- Daily wound care and clinic appts qMWF
- MEDIHONEY® Paste and bordered foam
Case 5 – Left Lower Leg Heterotopic Ossification (Bone growth through tissue)

- Just out of the hospital-Jan 2014
Case 5 – Left Lower Leg Heterotopic Ossification (Bone growth through tissue)

Day 1

- Presented to wound clinic a day later
- Wounds need to be closed prior to scheduling addl. surgery
Case 5 – Left Lower Leg Heterotopic Ossification (Bone growth through tissue)

Day 14

- Much improved, almost closed
Case 5 – Left Lower Leg Heterotopic Ossification (Bone growth through tissue)

Day 40

• Healed!- March 2014
Case 5 – Left Lower Leg Heterotopic Ossification (Bone growth through tissue)

Day 100

- Postop…..Again!
- Removal of HO posterior knee
- New wounds created from protrusion on calf
Case 5 – Left Lower Leg Heterotopic Ossification (Bone growth through tissue)

Day 120

- Much improved
- Continued treatment with sharp debridement and Medihoney gel/alginate. Covered with bordered foam.
Case 5 – Left Lower Leg Heterotopic Ossification (Bone growth through tissue)

Where Are We Now?
Impact of MEDIHONEY® to Practice

Think of MEDIHONEY® when your goal is to:

- Clean up wounds (remove slough and fibrin)
- Promote acute wound healing (granulation and epithelialization of edges)
- Gently remove eschars
- Dehisced wounds
- Kick start chronic wounds
### How To Choose???

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**All above topicals can be covered by foam/gauze and they all require a secondary dressing.**

***SQUARES indicate a dressing is acceptable to be used for that particular wound type.***
TIPS & Pointers

• Cover Gel, Paste with non-adherent
• Cover Calcium Alginate with absorptive
• Make sure that you cut the alginate to FIT the wound bed,
• Train your staff and the caregiver!
What not to do...

MEDIHONEY® Calcium Alginate should fit inside the wound edges, not around the outside!!
Questions?

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