KEEPING ‘UP’ WITH EXUDATE IN CHALLENGING WOUNDS: CASE STUDY SERIES EVALUATION OF A NOVEL, NON-BORDERED, DIMPLED, SILICONE FOAM DRESSING

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HYPERBARIC PHYSICIANS OF GEORGIA

BACKGROUND & METHODS

Foam-based dressings are used to **manage excess exudate in chronic wounds**, including under compression, whilst also **supporting underlying healing processes.**

- Poor exudate volume management can cause maceration of periwound tissue. Leakage from a dressing can cause patient distress, embarrassment, and withdrawal from social activities.
- Most foam dressings used under compression are thick “superabsorbers”. However thin dressings have advantages over thick (e.g. conformability, less bulk under compression), if they can manage high exudate.
- Compression devices are often left in place for periods of up to 7 days, hence dressings that can perform as intended over this length of time are desired.

This **10-patient case study series** aimed to **evaluate performance of a novel, non-bordered foam dressing*** with a soft silicone wound contact surface on highly exudating, hard-to-heal wounds.

- **Dressing was used to** manage exudate volume, protect the peri-wound skin, and improve wound condition under compression.
- **Dressing was applied** in conjunction with standard care (e.g. frequent debridement and cleansing, moist wound healing, compression). Dressing was changed according to local clinical practice.

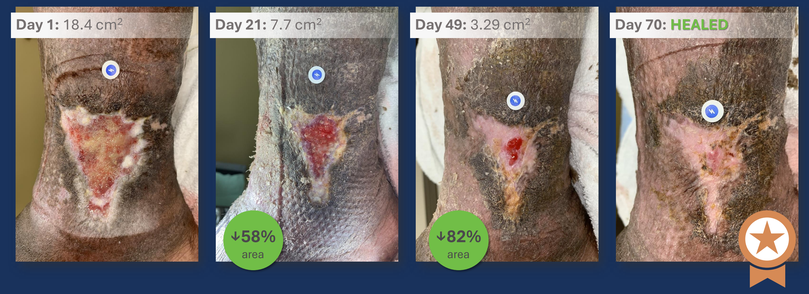
Data were collected at scheduled clinic visits:

- ***Wound size and healing progression*** (wound tissue type, peri-wound condition, signs of infection, exudate level/nature)
- ***Pain during dressing change procedure*** (using a visual analogue scale ranging from 0 [no pain] to 10 [worst pain recorded]).

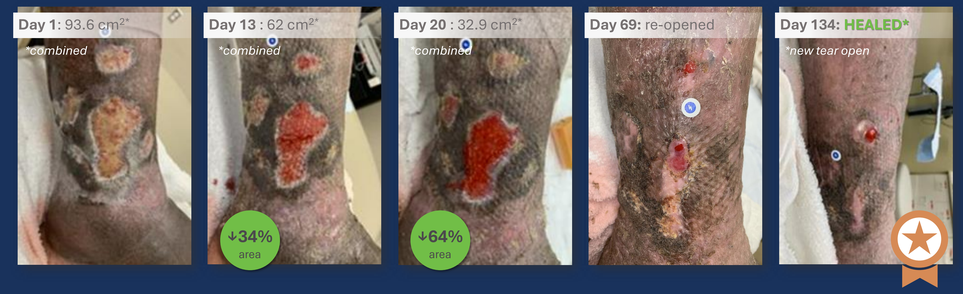
VENOUS LEG ULCERS

71-year-old female with multiple 3-month-old VLUs and history of recurrence; at study baseline wound infection had just been resolved, exudate levels remained high and serosanguinous/blood in appearance, peri-wound skin had improved over prior treatment but still exhibited maceration, wound was 100% slough, and treatment was switched to the novel dressing (maintaining compression). **The healing progression of both wounds it outlined below.** After 7 days periwound skin was healthy. By day 20 only one lateral wound remained open, but exudate remained high, and medial VLU had reduced in area by 58%. **Wounds progressed to full closure within study period** but the patient experienced recurrence and a new tear.

MEDIAL LOWER RIGHT LEG



LATERAL LOWER RIGHT LEG

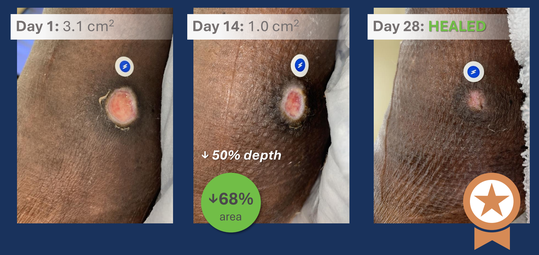


MIXED ETIOLOGY LEG ULCER

63-year-old male presented with an approximately 2.5-month-old mixed aetiology leg ulcer located on the lateral ankle of the left leg. Patient had undergone revascularization.

- At the beginning of the study, exudate was moderate and serosanguinous/blood, wound was 100% slough, periwound exhibited maceration and localized oedema, and treatment was switched to the novel dressing (maintaining compression). **Healing progression is outlined below.**

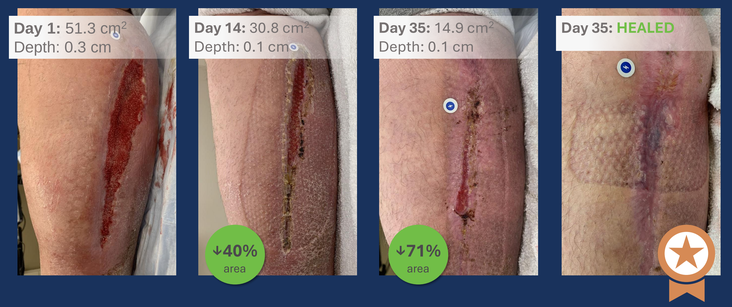
***Patient healed completely** & experienced no pain during study period.*



SURGICAL WOUND

51-year-old male with surgical wound; cellulitis had resolved prior to study start.

- At the beginning of the study the wound was 47 days old and exhibited high exudate that was serosanguinous/blood in appearance, with healthy periwound skin. Prior dressing changes had been painful, and patient was switched to the novel dressing (maintaining compression).
- **Wound reduced in size dramatically (below**), dressing change frequency was reduced, and pain medication at dressing change was no longer required.

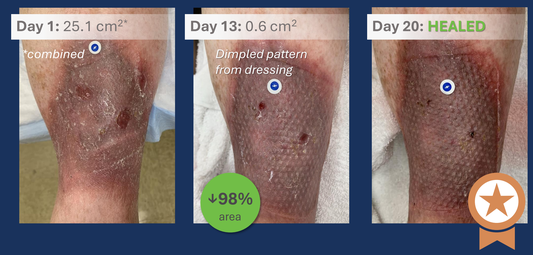


VENOUS LEG ULCER

72-year-old male presented with recurrent diabetes-related VLUs. The VLU in this study had been present for 81 days or approximately 2.5 months.

- At the beginning of the study, wound exudate was moderate and serosanguinous/blood, periwound exhibited moderate haemosiderin deposition, depth was 0.1 cm, and treatment was switched to the novel dressing (maintaining compression). **Healing progression is outlined below.**

***Patient healed** and experienced **no pain** during study period.*



CLINICAL TAKEAWAYS:

Novel engineered dressing properties supported wound healing processes while protecting peri-wound skin

1 THIN WAS A WIN

- Thin, dimpled dressing was **highly conformable** and was **not bulky under compression**.
- Depending on wound depth, the novel dressing was **often the only dressing needed** under compression.

2 STRONG EXUDATE MANAGEMENT

Traditional backed dressings upon removal often show congealed exudate. This concentrates drainage in one area and risks damage.

- In contrast, this novel dressing’s **breathable outer polyurethane film, dimpled pattern for fluid dispersal**, and **high moisture-vapor transfer capabilities** seemed to **enable absorbed fluid dispersal and evaporation**, resulting in strong fluid management.

- ✓ Lower fluid volumes to retain
- ✓ Less congealing
- ✓ Sometimes a darker exudate color (potentially more concentrated due to fluid evaporation)

3 PERIWOUND PROTECTION

- Dressing size bigger than the wound bed was often selected in these highly exudating wounds, to offer protection to the fragile periwound skin.
- **No maceration was observed** in these 10 highly exudating patients.

4 DRESSING WEAR TIME

- Could go a **full 7 days without a dressing change** in most instances, despite high exudate levels, with no pain experienced upon removal.

* Mepilex® Up (Mölnlycke Health Care)

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