

# Use of a Foam Dressing with a Unique Spoke-Shaped Delivery System\* on Pressure Ulcers of the Heel and Elbow

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## Introduction

Applying dressings to draining heel and elbow ulcers is a clinical challenge. Most absorbent dressings are cumbersome to apply and require special cutting and overlapping protocols, which can be confusing to caregivers. Often dressing edges are reinforced with adhesive tape or transparent dressings to prevent leakage and/or extend dressing wear time. A foam dressing with a unique spoke-shaped delivery system overcomes these dressing design limitations. The dressing is constructed from a conformable polyurethane foam pad, an additional absorbent nonwoven layer, and a top layer of transparent adhesive film. This film is moisture vapor permeable, which helps to prevent wound exudate strike-through and acts as a barrier to outside contamination. It is designed to allow easy, one-handed application to difficult body contours including heels and elbows.

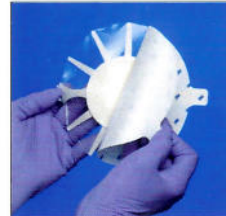
## Advantages of the Foam Adhesive Dressing\* with Easy Spoke Delivery

- ☐ Caregiver Friendly
  - Unique spoke design allows for fast, one-handed application to difficult body contours including heels and elbows.
  - Eliminates the need for cutting and patching.
  - Nonadhesive tabs prevent sticking to gloves.
- ☐ Absorbent & Adhesive
  - Polyurethane foam pad promotes rapid absorption of wound fluid away from the wound, reducing the risk of pooling and skin maceration.
  - Transparent adhesive film.
  - Spoke design allows film to conform to body contours.
  - Unique adhesive is designed to perform under both dry and moist (e.g. diaphoresis) skin conditions.
  - Eliminates need for additional securing supplies such as tape, scissors or transparent dressings.
  - Moisture vapor permeable for *Total Fluid Management*.
  - Prevents fluid strike-through.
  - Barrier to outside contaminants.

## Objective

The objective of this study was to evaluate the clinical performance of an adhesive foam dressing\* with a spoke-shaped delivery system in treatment of heel and elbow wounds. Three of the nine enrolled patients are presented as case studies.

## Application



Hold the dressing by one of the side tabs and remove the printed liner.



Stabilize the limb and position the dressing over the wound.



Press or "cup" the dressing onto the skin.



Press and conform the adhesive border onto the skin.



Beginning at the center of the dressing, grasp one section of the paper spokes and pull toward the outer edge of the dressing. Repeat procedure for each of the remaining paper spokes.



Firmly press and conform the adhesive border to the skin.

## Case Study #1

### Patient History

An 87-year old male presented with a stage III pressure ulcer of approximately 6-months duration on the heel. The wound was previously suspected of being colonized and was treated with a silver mesh dressing<sup>†</sup> covered with a transparent adhesive dressing.<sup>‡</sup> Following resolution of the suspected underlying infection, treatment of the wound was switched to the adhesive foam dressing.

### Wound Condition

- Ulcer Area: 4.6 cm<sup>2</sup>
- Erythema: None
- Drainage: Moderate & Serous
- Maceration: None
- Undermining: None
- Necrotic Tissue: 26% - 50%
- Granular Tissue: 26% - 50%

### Foam dressing\* applied to the wound



### Wound Condition

- Ulcer Area: 0.1 cm<sup>2</sup>, 97.8% reduction
- Erythema: None
- Drainage: Minimal
- Maceration: None
- Undermining: None
- Necrotic Tissue: None
- Granular Tissue: 76% - 100%

### Dressing Performance

There were no reports of adverse events during the study period. All dressing performance evaluations were rated as either "acceptable," "good," or "very good," with the vast majority being "good" or "very good." These assessments included: ease of application, ease of removal, patient comfort, conformability, adhesion, wear time, barrier properties, and overall clinician satisfaction. The wound healed the week following study conclusion with continued foam dressing treatment.

### Initial Study Visit



### Week 6 Interim Study Visit



### Week 8 Final Study Visit



## Case Study #2

### Patient History

An 80-year old female presented with a stage III pressure ulcer of approximately 6-months duration on the heel. The wound was previously suspected of being colonized and was treated with a silver mesh dressing<sup>†</sup> covered with a transparent adhesive dressing.<sup>‡</sup> Following resolution of the suspected underlying infection, treatment of the wound was switched to the foam dressing.

### Wound Condition

- Ulcer Area: 2.9 cm<sup>2</sup>
- Erythema: None
- Drainage: Moderate & Serous
- Maceration: ≤25%
- Undermining: 0.1 cm
- Necrotic Tissue: ≤25%
- Granular Tissue: 76% - 100%

### Foam dressing\* applied to wound



### Wound Condition

- Ulcer Area: Healed, 100% reduction
- Erythema: None
- Drainage: Absent
- Maceration: None
- Undermining: None
- Necrotic Tissue: None/Healed
- Granular Tissue: None/Healed

### Dressing Performance

There were no reports of adverse events during the study period. All dressing performance evaluations were rated as either "acceptable," "good," or "very good," with the vast majority being "good" or "very good." These assessments included: ease of application, ease of removal, patient comfort, conformability, adhesion, wear time, barrier properties, and overall clinician satisfaction.

### Initial Study Visit



### Week 4 Interim Study Visit



### Week 8 Final Study Visit



## Case Study #3

### Patient History

An 89-year old male presented with a five day history of a stage II pressure ulcer located on his left elbow. The wound was previously treated with moist gauze dressings. Wound closure occurred by the week 2 study visit.

### Wound Condition

- Ulcer Area: 1.8 cm<sup>2</sup>
- Erythema: None
- Drainage: Moderate & Serosanguinous
- Maceration: None
- Undermining: None
- Necrotic Tissue: None
- Granular Tissue: 76% - 100%

### Wound Condition

- Ulcer Area: Healed
- Erythema: None
- Drainage: Absent
- Maceration: None
- Undermining: None
- Necrotic Tissue: None
- Granular Tissue: None/Healed

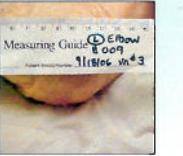
### Dressing Performance

All dressing performance evaluations were rated as "very good." The patient resided in his own home and liked that foam dressing eliminated the need for his daughter to do multiple dressing changes.

### Initial Study Visit



### Week 2 Visit



### Dressing applied



## Conclusions

This foam dressing with a unique spoke-shaped delivery system performed well in this nine-patient case study series.

- The vast majority of clinician assessments of dressing performance were "good" or "very good."
- Eight of the nine patients showed improvement in wound size and condition during this 8-week study. Four of the patients healed completely and only one patient remained unchanged.
- The dressing performed well on the heel and elbow wounds enrolled into the study.

\* 3M™ Tegaderm™ Foam Adhesive Dressing

† 3M™ Tegaderm™ Ag Mesh Dressing with Silver

‡ 3M™ Tegaderm™ Transparent Film Dressing

Poster design by Lutz Consulting, LLC

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