Nursing Staff Perceptions of a Pressure Injury Prevention Protocol Incorporating a Silicone Border Superabsorbent Polymer Dressing in a Long-Term Acute Care Setting

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BACKGROUND

Approaches to preventing sacral pressure injuries in Long-Term Acute Care (LTAC) hospitals may include complementary interventions such as manual rotation, pressure reducing devices, topical agents, and, more recently, dressings.[1,2] The three main dressings that have been researched for PI prevention are film dressings, hydrocolloid dressings, and foam dressings. To be successfully utilized in a high-risk patient population, dressings need to minimize burden on both the patient and nursing staff. Properties of suitable dressings should include pressure injury prevention characteristics (mitigation of pressure, moisture, and shear forces) and clinical satisfaction factors (e.g., ease of use, ability to stay in place, ability to remove, suitable coverage).

No prior investigations have evaluated nursing staff perceptions of dressings for PI reduction in Long-Term Acute Care (LTAC) settings. This abstract describes nursing staff perspectives of a pressure injury prevention protocol including a sacrum-shaped, multilayer, silicone border superabsorbent polymer (SAP) dressing.

OBJECTIVES AND HYPOTHESIS

A prospective, non-comparative clinical investigation was conducted to assess the tolerability and convenience of multilayer, silicone border SAP dressings as part of a pressure injury prevention protocol, using surveys completed by both patients and nursing staff. The interim analysis presented in this poster focusses on nursing staff perceptions of the dressings and dressing protocol.

Hypothesis:

- The interventional dressing is anticipated to be feasible to implement in a LTACH with high satisfaction ratings from the nursing staff.

METHODS

Setting

- Spaulding Rehabilitation Hospital: a 120-bed, Magnet accredited Long-Term Acute Care Hospital located in Boston, Massachusetts

Study Population

- LTAC patients at high risk for sacral pressure injury were eligible if they were predominantly bedbound or chair bound and age ≥ 18 years
- Patients were ineligible if they had a current sacral pressure or had known or suspected sensitivity to any of the components of the product being evaluated
- 240 total nurses contribute to patient care, including 3 WOCN certified staff

Study Design

- Open, non-comparative, prospective Clinical Investigation to evaluate tolerability and convenience of a pressure ulcer protocol incorporating Zetuvit Plus Silicone Border dressing
- This is a descriptive study to assess qualitative endpoints, no statistical hypothesis is used for a study design
- In this ongoing study, nursing staff will complete a survey assessing perceptions of the dressings and dressing protocol at the exit of each patient and at completion of the study. This poster presents nursing staff responses to surveys through August of 2024

INVESTIGATIONAL DRESSING

Investigational Dressing

1. Sacral-shaped, sterile self-adhesive multilayer superabsorbent dressing with a silicone interface which allows easy application and atraumatic removal.
2. Comprises a semi-permeable polyurethane backing film, a perforated silicone layer towards the side facing the patient's skin and an absorbent pad in between those two layers.

Figure 1a: Sacral multilayer, silicone border SAP dressing

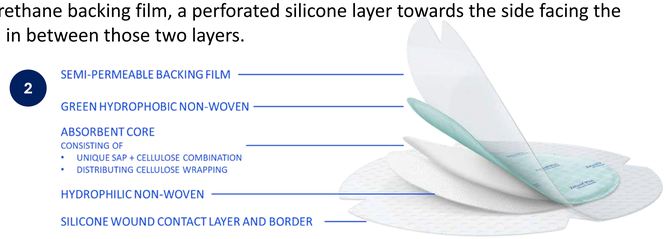

Figure 1b: Layers of the investigational dressing

DRESSING APPLICATION AND NURSING STAFF ASSESSMENT

- Nursing Staff were provided training on proper application and removal of study dressings
- Dressings were recommended to remain in-place for 7-days but may be changed at any time at the discretion to the nursing staff
- While in place, the sacral skin assessments could continue as per standards of care by peeling, observing, and re-applying
- The dressing protocol was added to the study sites standard of care for pressure injury prevention in high-risk patients
  - All patients received concurrent pressure injury prevention strategies
    - Pressure reducing mattress and chair
    - Diet and nutrition
    - Physical rotation
- Nursing staff completed assessment forms at each dressing change, and satisfaction surveys
- At conclusion of the study, semi structured interviews of nursing staff will be conducted to assess qualitative endpoints of satisfaction

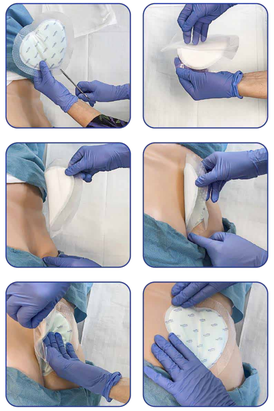

Figure 2: Technique for dressing application

STUDY OUTCOMES

Primary Outcome

- Nursing staffs completed surveys evaluating their perceptions of dressing characteristics including:
  - Please specify the comfort of application/changing
  - Please provide your impression on the ease/speed of application
  - Please provide your impression on the ease/speed of correct positioning
  - Please provide your impression on the ability of the dressing to stay in place
  - Please provide your impression on the ability to conform to body contours
  - Please specify your impression of the dressing coverage of sacral region
  - Please specify the ease of removal of dressing
  - What is your overall impression of dressing
- Questions were assessed on a 5-point Likert scale
  - Very Poor, Poor, Good, Very Good, Excellent

INTERIM RESULTS

- From 1/2024 to 8/2024, 22 nursing staff involved in the dressing protocol were surveyed.
- During this time, 28 patients participated in the dressing protocol.

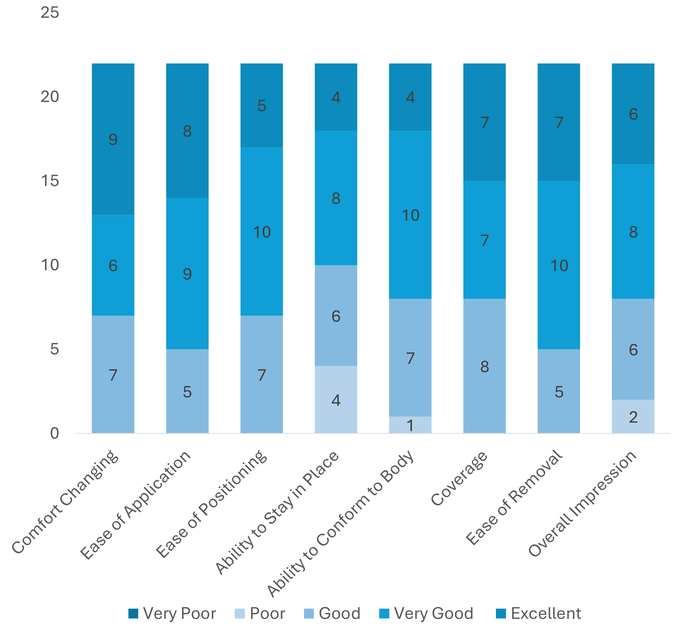

Figure 3: Nursing staff ratings of investigational dressing

- Median response for all assessed domains of dressing satisfaction was "Very Good"
- No nursing staff reported "Very Poor" on any of the satisfaction domains
- For overall satisfaction, over 90% of nursing staff reported that the dressings were good to excellent
- 18 of the 22 nurses responded "Good" to "Excellent" for the ability of the dressing to stay in place

CONCLUSIONS

In this interim analysis of our ongoing study, sacral dressings were successfully integrated into a pressure injury prevention protocol in a high-risk population of patients admitted to a LTAC. Nursing staff successfully integrated the dressings into their protocol and reported positive experiences and perceptions across all assessed domains. Satisfaction with "ability to stay in place" may be lower for nursing staff treating patients with frequent incontinence. See companion poster for patient outcomes: *Interim results from a non-comparative clinical investigation evaluating tolerability of a pressure injury prevention protocol incorporating a in long-term acute care setting*

1: European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel. (Ed.), Emily Haesler. s.l. : EPUAP/NPIAP/PPPIA, 2019
2: Challenges in pressure ulcer prevention. Dealey C, Brindle CT, Black J, Alves P, Santamaria N, Call E, Clark M. 3, s.l. : Int Wound J., Jun 2015, Vol. 12, pp. 309-12.