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AN OUNCE OF PREVENTION:

The Use of an Absorbent Soft Silicone Self-Adherent Bordered Foam Heel Dressing to Decrease the Incidence of Hospital-Acquired Heel Pressure Ulcers in an Acute Care Setting

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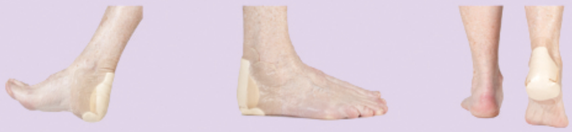
INTRODUCTION

- *In 2013, eighty-one hospital-aquired (HA) pressure ulcers occurred at AnMed Health, a 533-bed teaching hospital located in the southeastern United States. Thirty-three (41%) were heel pressure ulcers.*
- *During the first quarter of 2014, the AnMed Health Wound Care Team observed a spike in the incidence of HA heel pressure ulcers in the Coronary Care/ Cardiovascular Intensive Care Unit (CCU/CVICU).*
- *The Wound Care Team immediately began to evaluate interventions to decrease the number of HA heel pressure ulcers.*
- *A literature review was conducted to determine evidence-based practices for the prevention of heel pressure ulcers. Previous studies suggested that the use of an absorbent soft silicone self-adherent bordered foam dressing aids in the prevention of pressure ulcer development.[1,2]*
- *AnMed Health had experienced success with the sacral foam dressing identified in the previous studies in reducing the occurrence of HA sacral pressure ulcers.*
- *Based on this success, the Wound Care Team chose to conduct a pilot project with an absorbent soft silicone self-adherent bordered foam heel dressing*.*



OBJECTIVE

- *To evaluate an intervention aimed at reducing friction, shear, and improving skin microclimate, thereby reducing the incidence of HA heel pressure ulcers in a high risk population.*

Valarie Haisley, BSN, RN,CWCN, Kelli Potter, BSN, RN, CWON, CFCN, Jamie Wallace, BSN, RN, Robin George, BSN, RN and Kathy Betsill, MS, RN, NE-BC
AnMed Health - Anderson, South Carolina

IMPLEMENTATION

Setting

- *Our pilot project was conducted in the CCU/CVICU unit.*

Subject Selection Criteria

- *Included in the pilot project were all patients admitted to CCU/CVICU August 1st, 2014-October 31st, 2014 who were non-ambulatory or at high-risk for heel pressure ulcers due to diabetes mellitus, peripheral vascular disease, poor nutritional status, constant heel friction etc.*
- *Excluded from the project were patients not directly admitted to CCU/CVICU, ambulatory, had pre-existing heel pressure ulcers or pre-existing trauma to the heels.*

Method

- *In addition to standard of care pressure ulcer prevention interventions, patients who met inclusion criteria received an absorbent soft silicone self-adherent bordered foam heel dressing to both heels and dressings were reapplied as needed.*
- *The dressings were lifted daily to assess for skin breakdown.*
- *Prior to discharge from CCU/CVICU, each patient's skin was evaluated for signs and symptoms of heel pressure ulcer development.*

RESULTS

- *Patients in the pilot project group were compared to patients admitted to CCU/CVICU during the first quarter of 2014 (January 1st, 2014- March 31st, 2014). Patients in the control group received standard pressure ulcer prevention interventions.*
- *Patients in the comparison group and the study group were found to be similar based on age, BMI, and history of diabetes mellitus.*
- *From January 1st, 2014- March 31st, 2014, three patients in the control group developed HA heel pressure ulcers during their stay in CCU/CVICU.*
- *In comparison, no patients in the intervention group developed HA heel pressure ulcers during the pilot project period (August 1st, 2014- October 31st, 2014).*
- *Incidentally, one patient admitted to CCU/CVICU during the pilot project period met the inclusion criteria but mistakenly did not have the dressing applied. This patient subsequently developed a HA heel pressure ulcer.*

CONCLUSION

- *Of the thirty-one patients included in the pilot project, none developed a HA heel pressure ulcer.*
- *Due to the success of the project, the facility will incorporate the use of an absorbant soft silicone self-adherent bordered foam heel dressing into its skin care/wound care protocol.*
- *In order to validate the results using a larger sample size, the CCU/CVICU staff continued to use the foam heel dressings on high risk patients for an additional three months. No hospital acquired heel pressure ulcers occurred during this time.*

REFERENCES
1. Brindle, T., & Weggelin, J. (2012). Prophylactic Dressing Application to Reduce Pressure Ulcer Formation in Cardiac Surgery Patients. Journal of Wound, Ostomy and Continence Nursing, 39(2), 133-142.
2. Santamaria, N., Gerdtz, M., & Sage, S. et al. (2013). A Randomized Controlled Trial of the Effectiveness of Soft Silicone Multi-Layered Foam Dressings in the Prevention of Sacral and Heel Pressure Ulcers in Trauma and Critically Ill patients: The Border Trial. International Wound Journal, 1-7.

Footnotes
Poster support provided by Molnlycke Health Care.
Mepilex Border Heel manufactured by Molnlycke Health Care, LLC, Norcross, GA