Heel Offloading Boots and Therapists

Elizabeth Warner, PT | Michael Zinko, PT

Bristol Health

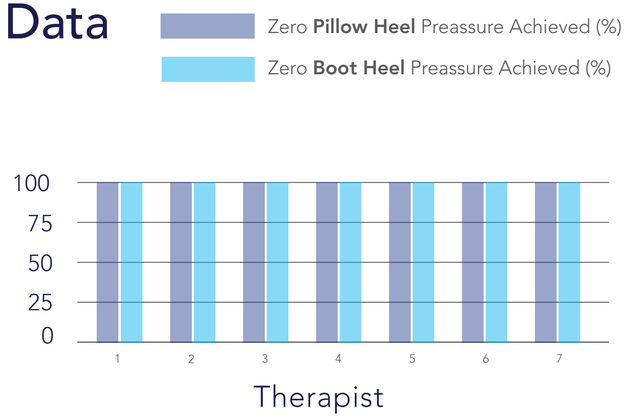
Background

There have been many articles and guidelines written to decrease the incidence of heel pressure ulcers.[1] Some methods studied the use of-staff education [2], dressings[3], support surfaces and offloading devices-wedges, pillows, and boots [4].

Citations regarding use of hospital pillows being used under the calves to float the heels note that they can be of low quality, making them ineffective over time, that they don't stay where placed and that they are not designed to reduce friction/shear when there is patient movement [5]. Boots were noted to allow improvement in patient movement and improved ease of staff application/removal [6].

In the modern health care system environment, patient care products are often part of a larger hospital contracting system that changes over time so that prior products are replaced as part of an overall contract change in order to facilitate expense reductions and may or may not be clinically equivalent.

Data



Objective

Since heels are a high risk area for hospitalized patients to develop pressure ulcers, determining effective offloading capabilities for the hospital's new heel boots** on formulary as applied by therapists was our objective.

Method

Therapists were given verbal instructions to "offload the right heel" of a mannequin with a hospital pillow and then with the new boot. There was no product education provided. A pressure monitor was then utilized under the heel and measurements recorded.

** Stryker Sage, Prevalon Heel Protector, Cary, IL

CITATIONS

1. Gleeson, D. (2016). Heel pressure ulcer prevention: a 5-year initiative using low-friction bootees in a hospital setting. Wounds UK, 12(4), 80–87.

2. Sullivan, R. (2017). Use of a Diagnosis-Driven Heel Pressure Injury Algorithm. MEDSURG Nursing, 26(6), 399–402.

3. Eberhardt, T. D., Soares, R. S. de A., & et al. (2021). Prevention of pressure injury in the operating room: Heels operating room pressure injury trial. International Wound Journal, 18, 359–366.

4. Rajpaul, K., & Acton, C. (2016). Using heel protectors for the prevention of hospital-acquired pressure ulcers. British Journal of Nursing, 25(6), S18–S26.

5. Clegg, R., & Palfreyman, S. (2014). Elevation devices for the prevention of heel pressure ulcers: a review. British Journal of Nursing, 23(20), S4–S11.

6. Donnelly, J., Winder, J., & et al. (201AD). An RCT to determine the effect of a heel elevation device in pressure ulcer prevention post-hip fracture. Journal of Wound Care, 20(7), 309–308.

7. Weaving, L. (2013). An overview of heel pressure ulceration-what do we know? Podiatry Now, 16(11), 10–13.

Recommendations

We recommend more research using various patients with a variety of medical conditions and use of pressure measurements taken intermittently since research has shown that pillows are not effective over time for offloading heels. Additionally, we would recommend consideration of clinical evaluation of formulary product changes by the multidisciplinary team prior to implementation.