

# Preventing pressure ulcers by employing Advazorb Heel<sup>®</sup> hydrophilic foam dressings

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## Introduction

The prevention of pressure ulcers has been set as a target by the Commissioning for Quality and Innovation (CQUIN) framework, and the Department of Health (2008) are driving to reduce the number of hospital-acquired pressure ulcers (White et al 2009). Most Trusts participate in monthly NHS Safety Thermometer CQUIN 2013/14 surveys, which measure the prevalence of grade 2 and above pressure ulcers. The heel has been identified as the second most common site, accounting for up to 28% of all pressure ulcers (Barczak et al 1997). Heel ulcerations are notoriously difficult to heal and management and treatment can be costly. From the patient's perspective this has an undeniable impact on their quality of life: near constant pain, delayed mobilisation and increased time in hospital. Patients with fractured hips exemplify those at high risk of heel pressure ulceration; they tend to be older, frail and have limited mobility, plus a high proportion has dementia (Rademakers et al 2007, Heyneman et al 2009 and Campbell et al 2010).

This abstract reports on 10 patient evaluations employing Advazorb Heel<sup>®</sup> foam dressings in the prevention of pressure ulcers. The evaluation was undertaken in a general hospital on an orthopaedic ward. Ten patients who had sustained a neck of femur fracture were recruited and they were followed from admission to discharge.

## Method

11 ward staff were trained to use the Advazorb Heel<sup>®</sup> dressing before commencement of the evaluation. The ward staff were trained on the protocol of how to monitor patients' skin and record it twice daily using the PULSE skin assessment. The Advazorb Heel<sup>®</sup> dressings were changed every 2 days on both heels. On admission to the ward, patients were assessed using the Waterlow Score risk assessment and the SSKIN and PULSE skin assessments. All patients admitted with neck of femur fracture had the Advazorb Heel<sup>®</sup> dressing applied to both heels and secured with Tubigrip from toe to knee. A body map chart was completed twice daily to note the skin integrity of both heels. All neck of femur fracture patients were placed on Dyna-Form Mercury Advance, Nimbus 3 or Alpha X Cell mattresses and all patients were repositioned every two to four hours.

Patient demographics and repositioning, Waterlow Score, MUST score, serum albumin levels, mental status, other medical conditions, body mass index (BMI), medication, and the mattresses used were documented carefully. Any pressure ulcers that developed were graded and validated by the Tissue Viability Team and the heels were assessed as to their vascular status and assessed for foot pulses. Any pressure ulcers that developed were photographed as per current policy and patient consent or consultant's permission for medical reasons was obtained. Patients were excluded if they were unwilling to participate, if they were readmitted with pressure ulcers or if they weighed over 25 stone (159 kg).

After the eight-week evaluation period, all of the ward staff were given a questionnaire to gain their opinions of the Advazorb Heel<sup>®</sup> dressing.

## Results

The patient population consisted of one male and nine females with neck of femur fractures. The age range of the patients was between 57 to 89 years (mean 85 years). The Waterlow Scores ranged from 14 to 44 (mean 20). The BMI ranged between 14 and 27 (mean 22) and the serum albumin ranged from 24 to 44 (mean 36). All patients were nursed on alternating mattress systems, seven on Alpha X Cell, one on Nimbus 3 and two on Dyna-Foam Mercury Advance.

The number of days patients were on the evaluation ranged from 6 to 13 days (mean 9). All patients completed the evaluation and none developed pressure ulcers on their heels.

## Discussion

This was a small evaluation of only 10 patients that employed the Advazorb Heel<sup>®</sup> foam dressing in the prevention of pressure ulcers and it was demonstrated to be successful. The ward staff were delighted with the results and found the Advazorb Heel<sup>®</sup> foam dressings easy to apply and they contoured to the patient's heel, enabling a very snug fit. Current methods to prevent the development of pressure ulcers on heels are more expensive: the cost of the Advazorb Heel<sup>®</sup> foam heel dressings over a 10 day period is £51.90 per patient.

## Conclusion

Employing the Advazorb Heel<sup>®</sup> foam heel dressings in conjunction with an alternating mattress system in the prevention of pressure ulcers appears to be a very cost effective solution. The general hospital in the evaluation plans to roll it out for all frail elderly patients to help reduce the number of hospital-acquired pressure ulcers and eventually reach nil hospital-acquired pressure ulcers.

## References

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