The Effective Management of a Category 3 Heel Pressure Ulcer using Flaminal®

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Introduction

A pressure ulcer is a "localised injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear"⁽¹⁾. The pressure ulcer can present as intact skin or an open ulcer and are classified into four categories, with category 4 considered the most severe. After the sacrum, the heel is frequently reported as the second most common site for the development of pressure ulcers, as well as a site where the most severe ulcers develop⁽²⁾.

The Patient

This case study involves an 88-year-old female who developed a category 3 left heel pressure ulcer. She had an extensive medical history including, vascular dementia, hypertension, orthostatic hypotension, thrombocytopaenia, stroke, pernicious anaemia, and osteoporosis. The patient was admitted to hospital following a fall which resulted in a complex fractured neck of femur requiring hemiarthroplasty with the added complications of prosthetic joint infection, requiring a peripheral inserted central catheter line (PICC) for long term antibiotic therapy. During admission, the patient developed a left heel pressure ulcer and at the point of discharge to a long term rehabilitation centre, was referred to the Tissue Viability Specialist.

The ulcer measured 2.5 x 2.5cm and the devitalised tissue was 100% eschar; Just before review of RANP Tissue Viability, the devitalised eschar had been lifted by autolytic debridement and a 0.2cm depth and sloughy ulcer base, verification of a category 3 pressure ulcer confirmed. The surrounding skin was healthy with low levels of serous exudate, signs of local wound colonisation but no obvious evidence of spreading infection. The patient required analgesia at dressing changes to support pain relief.

Method

The aims were to continue the debridement process using





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conventional methods that promote ongoing autolytic debridement, reduce the risk of infection, protect the surrounding skin, and encourage the growth of healthy granulation tissue and epithelisation. A holistic approach was advocated with the consideration of pressure ulcer prevention/management, and nutrition and hydration support to optimise wound healing. The primary dressing selection included the implementation of Flaminal[®] Hydro, an Enzyme Alginogel with proven broad spectrum antimicrobial properties.

Recognised for its soothing ability, Flaminal® Hydro manages low to moderate levels of exudate whilst simultaneously, supporting the autolytic debridement process and further reducing the bioburden, as devitalised tissue bacterial food resources are depleted. Successful debridement facilitates the growth of healthy granulation tissue and the epithelisation process. A secondary silicone foam adhesive dressing and tubular garment was utilised with skin barrier to the surrounding areas to offer further protection. Dressings changes were undertaken every 3 days.

Result

Flaminal[®] Hydro facilitated the successful debridement process, and exudate levels were well controlled which aided the protection of the peri-wound edges and surrounding skin. Healthy granulation and epithelial tissue formed, and the ulcer proceeded to heal within 8 weeks from the initiation of Flaminal[®] Hydro primary dressing.



Discussion

Due to their anatomical location and the fact that the heel has no muscle or fascia and little subcutaneous tissue, the heels are deemed to be highly vulnerable to pressure damage and pressure ulcer development. Heel pressure ulcers are often severe and challenging to manage and can have a significant negative effect on a patient's health-related quality of life, causing pain, reducing mobility, prolonging hospital stays, and in severe cases resulting in amputation⁽³⁾.

Conclusion

The Tissue Viability Advanced Practitioner emphasised that all wound care objectives were achieved, and wound healing was accomplished in a timely manner. The dressing regime proved to be clinically effective with an uncomplicated application process. The ulcer remained infection free for the duration of treatment and dressing changes were uneventful and well tolerated by the patient.

Successful patient outcomes were achieved due to a combination of appropriate dressing selection and all elements of SSKIN assessed, implemented and evaluated (image below).

This case study illustrates the effectiveness of Flaminal® Hydro and its ability to support exudate management, antimicrobial protection and continuous debridement whilst simultaneously assisting in a reduction of pain at dressing changes. The implementation of Flaminal® Hydro, primary dressing subsequently enabled an uninterrupted successful wound healing outcome.

References

1. European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA: 2019

2. Greenwood C (2020) An exploration of the use of devices for the prevention of heel pressure ulcers in secondary care: a realist evaluation. Doctoral thesis, University of Leeds, Leeds, England.

3. Greenwood C (2021) Heel pressure ulcers: understanding why they develop and how to prevent them. Nursing Standard. doi: 10.7748/ns.2021.e11740 https://journals.rcni.com/nursing-standard/cpd/heel-pres-

sure-ulcers-understanding-why-they-develop-and-how-to-prevent-them-ns.2021.e117 40/pdf (accessed May 2024).

