

WHEN TIME IS OF THE ESSENCE: USING AN ENZYME ALGINOGEL® TO ACHIEVE HEALING IN A QUADRIPLÉGIC PATIENT WITH PRESSURE DAMAGE

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Introduction

Pressure ulcers are defined as 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⁾. They pose a significant clinical problem: they cause discomfort and pain, delay recovery both physically and psychologically and negatively affect a patients quality of life.

If not treated effectively and in a timely manner, they can increase the risk of mortality and have a major economical impact of the health system⁽²⁾.

Skin integrity can also be breached as a result of prolonged exposure to moisture, increasing the risk of pressure damage, and is often overlooked. As a result, skin flora can penetrate the disrupted barrier, causing further irritation and inflammation, leading to excoriation and potential incontinence associated dermatitis⁽³⁾.

The Patient

This case study involves a 54-year-old diabetic male who developed a category 3 pressure ulcer over the lower sacral area and bilateral buttocks. The patient became quadriplegic secondary to a traumatic spinal cord injury and was awaiting admission to a neurological rehabilitation centre.

The patient was referred to the Tissue Viability Specialist Nurse and at the initial assessment was found to have extensive skin damage affecting lower sacrum and both buttocks skin. The right buttock pressure ulcer measured 7 x 4cm with 80% slough noted at ulcer bed and the left buttock measured 4 x 2cm with 30% slough and 30% dermis skin layer and 40% epithelial tissue at the wound bed. The patient was of darker skin tone therefore, erythema would not be seen as area of redness. Although, no skin colourism noted that could indicate erythema. There were low levels of serous exudate, no odour and at this point was verified as an unstageable pressure ulcer with incontinence associated moisture damage involvement. Microbiology swabs were negative and blood markers were all within normal range.

Method

The treatment aim was to achieve wound healing as quickly as possible, reduce the risk of infection, support autolytic debridement and prevent further pressure damage. The patient could not be accepted at the neurological rehabilitation centre until full healing was accomplished.

Flaminal® Hydro, an Enzyme Alginogel®, was selected as the primary dressing following the initial assessment due to low levels of exudate, with a secondary silicone adhesive foam. Dressing changes were advised on alternate days or more frequently if dressing contamination occurred due to incontinence. The tissue viability team scheduled weekly reviews, regular medical photograph, neurophysiotherapy and continence teams involvement. An agreement with the patient in relation to his repositioning plan was made: to spend minimal time on sitting or back lying positions avoiding pressure over the affected area.

Result

After two weeks post-commencing treatment the debridement of devitalised tissue was evident, there was also a noted reduction of the pressure ulcer dimensions. The pressure ulcer categorisation verification process was supported by the accomplishment of debridement and the pressure ulcer was declared as category 3.

At the final assessment, Right buttock lesion continues to improve and show signs of healing. Appears smaller and no further slough tissue. Wound bed has 30% granulation and 70% epithelial. Left buttock small superficial excoriation lesions noted. All with dermis exposed, no slough tissue and minimal exudate. Hyperpigmented skin/ scarring skin surrounding the lesions. Complete healing was achieved nine weeks post occurrence, with the implementation of appropriate pressure ulcer management strategies and the use of Flaminal® Hydro and a secondary silicone foam adhesive.

Discussion

The treatment of pressure ulcers remains a significant burden to the NHS with a cost of an estimated £1.4 million everyday⁽⁴⁾. The impact on

patients can be considerable, due to increased pain, length of hospital stay, delayed rehabilitation and sometimes death.

Flaminal® Hydro was chosen as the primary dressing as it is indicated for slightly to moderately exuding wounds and facilitates debridement of devitalised tissue by creating an optimum moist wound healing environment. This, resulting in the elimination of the nutrients for bacteria, and encouraging the growth of healthy granulation tissue. In addition, its antimicrobial protection properties reduce the risk of infection. Although, it's important to highlight that the healing was achieved with the usage of this product along appropriate prevention and management pressure damage strategies, alighted from day one of TVN involvement and with patient's concordance.

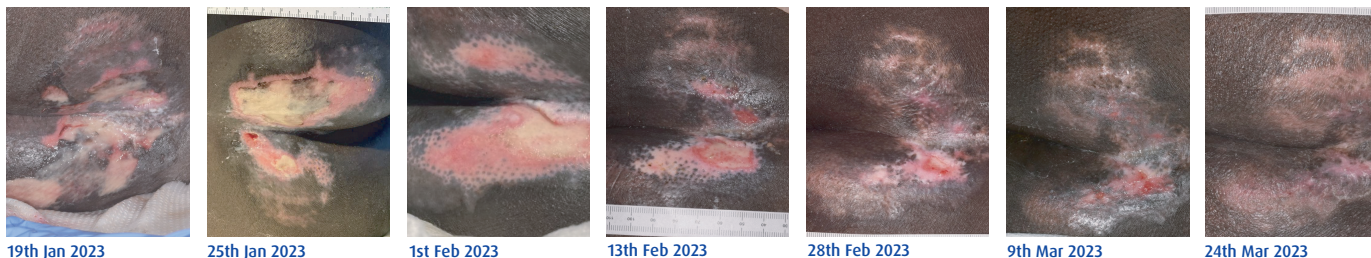
Flaminal® Hydro is part of the hospital dressing formulary and is always available in the wards so easy to access with easy application. No contraindications present or negative reactions felt by the patient to the product. The timely healing of the pressure ulcer was imperative in order to enable the patients access to the much needed specialised rehabilitation service, to improve both the patients outcome and his quality of life.

Conclusion

The Tissue Viability Nurse concluded that the management aims of debridement, infection prevention and wound healing were all achieved. There is a consensus that devitalised tissue and wound infection impedes wound healing. This case study validates the efficacy of Flaminal® as a debridement agent and an effective dressing that gives antimicrobial protection.

References

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