

# Effective Management of Sacral Tissue Damage Caused by a Combination of Pressure and Moisture Using an Enzyme Alginogel

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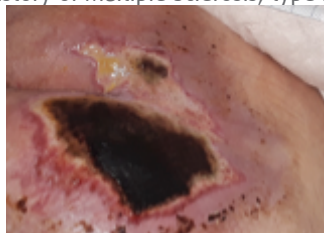
## Introduction

Pressure Ulcers are defined as injuries to the skin and underlying tissue secondary to the deprivation of blood supply to the cells as a result of uninterrupted pressure. They are categorised according to their depth, using a validation tool namely the National Pressure Ulcer Advisory Panel (NPUAP 2014). The severity of pressure ulcer are categorised from 1-4, the latter being the most severe. Additionally there are two extra classes namely; unstageable that depicts that the ulcer bed is obscured by devitalised tissue and deep tissue injury that relates to pressure damage under intact skin, which simulates the appearance of 'bruising'.

Moisture lesions are described as inflammation and erosion of the skin caused by prolonged exposure to various sources of moisture, including that of urine and faeces (Grey et al 2011).

It is important to recognise the cause of lesions that present on the sacral area as the treatment and management of pressure ulcers and moisture lesions differ. For example, a moisture lesion will not repair solely with pressure relief/reduction treatment. However, there is evidence to support that moisture increases the risk of pressure damage, therefore pressure relief compliments the treatment aim of both. (Fletcher 2008).

This case study involves a 71 year old male who has a history of Multiple Sclerosis, type 2



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Diabetes, Hypertension and bilaterally lower leg ulceration. The patient lives alone and had experienced a decline in mobility resulting in him sleeping in a chair downstairs for quite some time.

The patient was admitted to hospital with sepsis of unknown origin and also presented with an unstageable necrotic pressure ulcers with associated moisture damage to the right/left buttocks and sacrum. The appearance of the ulcers was indicative of a combination of deteriorating moisture damage and prolonged pressure. The patient was not known to community services and therefore the duration of skin damage was undetermined. During admission the patient was reviewed for surgical debridement but conservative treatment was considered the best option.

At the initial assessment by the Tissue Viability Specialist Nurse, the combination ulcer measured 10cm x 11cm with an unknown depth (unstageable); which spanned across the sacrum and buttocks. There was evidence of erythema which extended by 2cm from the peri-wound edge. The ulcer bed was 100% necrotic and there was high levels of exudate.

## Method

The treatment aim was promote autolytic debridement of the devitalised tissue and by doing so reducing the risk of infection and promoting the regeneration of granulation tissue.

Consideration was also given to exudate management with the intention of simultaneously creating a moist wound healing environment whilst preserving the surrounding skin.

An Enzyme Alginogel primary dressing, Flaminal



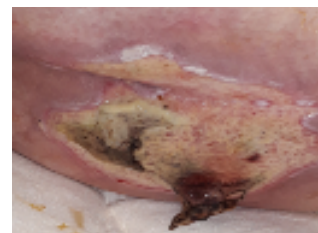
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Forte, was selected in order to support the autolytic debridement process. Flaminal Forte maximises this process which ultimately gives rise to the discontinuation of the devitalised tissue food supply required for the survival of bacteria. Flaminal Forte also has a higher alginate concentration than its Flaminal Hydro counterpart and is recommended for moderate to high levels of exudate.

A secondary silicone foam adhesive was utilised to support comfort, absorbency and to reduce the risk of trauma at dressing changes. Daily dressings was recommended. Advice was also specified in relation to pressure relieving equipment, repositioning and nutritional support. The patient had also been commenced on antibiotic therapy.

## Result

Following the commencement of the advised treatment using Flaminal Forte as the primary dressing, there was noted improvement of the peri-wound skin, exudate control was achieved



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and the surrounding erythema resolved. Within four weeks autolytic debridement of the devitalised tissue was accomplished; with minimal accompanying bedside sharp debridement being undertaken. Additionally there was no further reoccurrence of infection.

## Discussion

Treating pressure ulcers remains a significant burden to the NHS with a cost of an estimated £1.4 millions everyday (Guest et al 2017). The impact on patients can be considerable, due to increased pain, length of hospital stay, decreased quality of life and sometimes death.

## Conclusion

The Tissue Viability Nurse concluded that the management aims of debridement, infection prevention and exudate control were all achieved using the chosen primary dressing of Flaminal Forte. The wound healed significantly, negating the need for surgical intervention, and the additional risk factors that this intervention brings. The patient responded was discharged home to the care of the community District Nursing team within four weeks and with a wound that was manageable without the further need for intervention by the Tissue Viability team.

## References

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