

# FLAMINAL® IN THE MANAGEMENT OF A WOUND WITH A SUSPECTED BIOFILM

Lisa Wharton, Community Staff Nurse

Cumbria Partnership NHS Foundation Trust, Keswick, Cumbria

## Introduction

This case study describes the management of Brenda (pseudonym), a 58-year-old lady with a recalcitrant wound of over 3 years duration. Brenda had a BMI of 30 and an extensive medical history including rheumatoid and osteo arthritis, renal failure, peripheral neuropathy and she had had an above knee amputation in 2016 as a result of atherosclerosis and gangrenous foot ulcer. Brenda's mobility suffered greatly after this and she was no longer able to mobilize independently, reliant on carers and being hoisted for repositioning. Although high specification pressure relieving equipment was provided for Brenda, peripheral neuropathy reduced her awareness of the need to reposition.

## Method

In August 2014, Brenda had developed a pressure ulcer to her left hip which measured 3.5cm x 1.5cm and was covered with 100% necrotic tissue (fig 1). Once debrided the wound was documented as being a category 4 pressure ulcer with a depth of 4.5cm. Over the following 3 years a multitude of wound management dressings and treatments had been used including Negative Pressure Wound Therapy and various antimicrobial products. During this time, the wound went through periods of improvement and deterioration, but eventually became static.

In May 2017, Brenda's wound measured 3cm x 0.5 cm and 0.8 cm depth and was still showing no signs of healing (fig 2). Exudate levels were moderate and there was often erythema to the peri wound skin but the patient had no systemic signs of infection. It was suspected that the wound may contain a biofilm. At this point a new treatment regimen was initiated. Flaminal® Forte (Flen Health) was applied directly into the wound and was covered with an absorbent secondary dressing. Dressings were changed two to three times per week dependant on exudate levels.

## Results

Almost immediately after starting treatment with Flaminal®, exudate levels decreased and the wound started to reduce in size. This progress continued and the wound was fully healed within 7 weeks (fig 3). Flaminal® was successful in reducing the bacterial load and exudate levels and the ulcer remained infection free to healing. The nursing team found Flaminal® very easy to apply and dressing changes were non-traumatic for Brenda.

## Discussion

There are various factors that contribute to the recalcitrance of wounds: these can include connective tissue disorders, arterial compromise, immobility, end-stage renal or heart disease, cancer and advancing age to name a few. These factors on their own or in combination can lead to chronicity. In this case, a combination of co-morbidities along with a suspected biofilm was no doubt contributing to the delay in Brenda's wound fully healing.

Flaminal® (an Enzyme Alginogel®), contains two naturally occurring antimicrobial enzymes, glucose oxidase and lactoperoxidase which kill bacteria without damaging healing cells.<sup>1</sup> Flaminal® has the capability to absorb excess exudate while remaining in a gelled state, aid autolytic debridement, control wound bioburden and promote wound healing due to its non-cytotoxic formulation.

## Conclusion

This case study demonstrates the effectiveness of Flaminal® Forte in a chronic wound that had failed to heal over 3 years. Almost immediately after starting treatment with Flaminal®, Brenda's wound responded and progressed towards healing over a 7-week period. Numerous previous treatments had failed to move the wound out of a persistent non-healing state.

FIG 1



FIG 2



FIG 3



### References

1. White R (2006) Flaminal®: a novel approach to wound bioburden control. Wounds UK 2 (3): 64-9