

FLAMINAL® IN THE MANAGEMENT OF A SELF-INFLICTED WOUND TO THE LEFT CALF IN A 40-YEAR-OLD FEMALE

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Summary

This communication describes the management of a self-inflicted wound and the use of an antimicrobial enzyme alginate (Flaminal® Forte) to facilitate healing in a methicillin resistant *Staphylococcus aureus* (MRSA) positive wound without causing discomfort to the patient.

Introduction

Self-harm refers to a spectrum of behaviours where demonstrable injury is self-inflicted: skin cutting is the most common form. A national interview survey suggested that in Great Britain between 4.6% and 6.6% of people have self-harmed; overall, women are more likely to self-harm than men.¹ Acts of self-harm are not necessarily connected to suicidal intent but rather an attempt to communicate with others, to influence or secure help or care from others or a way of obtaining relief from a difficult and otherwise overwhelming situation or emotional state.

The patient

A 40-year-old married female inpatient with a long history of self-harm deliberately cut her left calf, initially with a razor blade and then a spoon to remove additional tissue. The same wound was cut deeper on a further two occasions with blades that had been discretely concealed in various items she brought into hospital from home. The patient suffered chronic anaemia, refusing treatment; HB 8.8 29.5.12, previous anorexia as form of self-harm, nutritionally poor; eats biscuits only at time of injury. The patient first self-harmed at the age of 12 as a coping mechanism. She feels a burden to her husband and children, is impulsive by nature and at risk of accidental/completed suicide.

Wound features

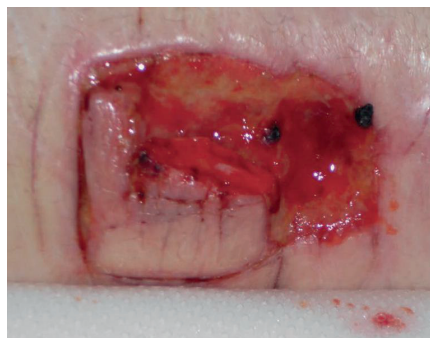
The initial self-inflicted wound measured 6.5cm x 4.8cm, with a visible flap of skin present (Figure 1). One week later after a home leave visit Mrs P cut off a piece of flesh, including part of the flap, with a blade she had concealed inside a DVD case brought in from home (Figure 2). Since she tested positive for MRSA, eradication therapy was commenced and a decision taken to manage the wound with a silver silicone foam dressing.

There was no sign of spreading infection or malodour and the levels of exudate were variable for the next two weeks, mainly dependent on the amount of patient interference with the dressing. Three weeks after initial injury, Mrs P gouged the wound further with a blade hidden in the television remote control. She was transferred at this juncture to the psychiatric intensive care unit, as her cutting behaviour was believed to be getting out of control.

Figure 1. Wound measured 6.5cm x 4.8cm on first presentation



Figure 2. Wound measured 6.4cm x 4.3cm after the patient cut off a piece of flesh



Whilst the length and width of the wound had decreased to 4.7cm x 4cm the wound was now fairly deep with uneven edges. The change in wound shape necessitated a change of the dressing regimen. Flaminal® Forte was selected to treat the MRSA as well as to prevent wound infection as the enzyme alginate would maintain full contact with the wound surface, and a silicone-bordered foam, Mepilex Border, was selected as a secondary dressing. Antimicrobial dressings are usually only used for a maximum of 2 weeks however Mrs P was high risk due to her host defences being compromised; chronic anaemia, poor nutrition plus constant interference with the wound.

Results of wound management with Flaminal® Forte

After 4 weeks, a substantial improvement in the wound was noted; depth greatly reduced, contraction taking place, healthy granulation, no local infection from MRSA (Figure 3). After 5 weeks of treatment with Flaminal® Forte the wound had decreased in size to 2.0cm x 1.2cm with no depth to the wound, there was healthy granulation tissue present as well as signs of epithelialisation. The staff found the dressing regimen easy to follow and importantly Mrs P found the Flaminal® Forte to be acceptable with no complaints of discomfort. The wound did not display any signs of critical colonisation or overt infection despite continued tampering and compromised host defences.

Figure 3. Wound measured 3.4cm x 1.6cm after 4 weeks



Discussion

Deliberate self-harm is relatively common within psychiatric service users. This patients' history indicated a pattern of self-mutilation from the age of 12 which the persistent gouging of the wound supported. As a practitioner it can be frustrating to treat wounds that are repeatedly traumatised, however it is important that practitioners are non-judgmental and treat with respect patients who feel a need to act out this behaviour. Selecting a topical treatment that would be comfortable and with a proven broad-spectrum antibacterial activity including multi-resistant strains of bacteria was an important consideration in the treatment plan. Flaminal® is an antimicrobial enzyme alginate, which combines the benefits of hydrogels and alginates with a patented antimicrobial enzymatic complex (glucose oxidase combined with lactoperoxidase) to create a non-cytotoxic wound dressing.² Antimicrobial dressings in Leicestershire Partnership NHS Trust are not usually used for more than 14 days. However, some wounds require extended antimicrobial cover; deliberate self-harm wounds with known contamination fall into this category. Flaminal®, which has no known cytotoxicity was deemed to be a clinically safe and effective dressing for use beyond the standard 14 days.

Conclusion

Anaemia and poor nutrition are known to compromise wound healing, when these risk factors are coupled with MRSA and a patient constantly tampering with their wound it provides the clinician with multiple challenges and the need for careful product selection. Selecting a product which is safe clinically, has proven antimicrobial properties and easy to use ensure the clinician is able to focus on supporting a patient with complex emotional and psychological needs whilst confident that the product will not cause any additional problems for the patient or the nurses and aid the wound healing process.

References

1. Meltzer H, Lader D, Corbin T, Singleton N, Jenkins R, Brugh T et al. Non-Fatal Suicidal Behaviour Among Adults aged 16 to 74 in Great Britain. 2002
2. White R. Flaminal®: a novel approach to wound bioburden control. Wounds UK 2006; 2(3):64-69