The management of a cellulitis of a lower leg using ActivHeal® AquaFiber Ag

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Background

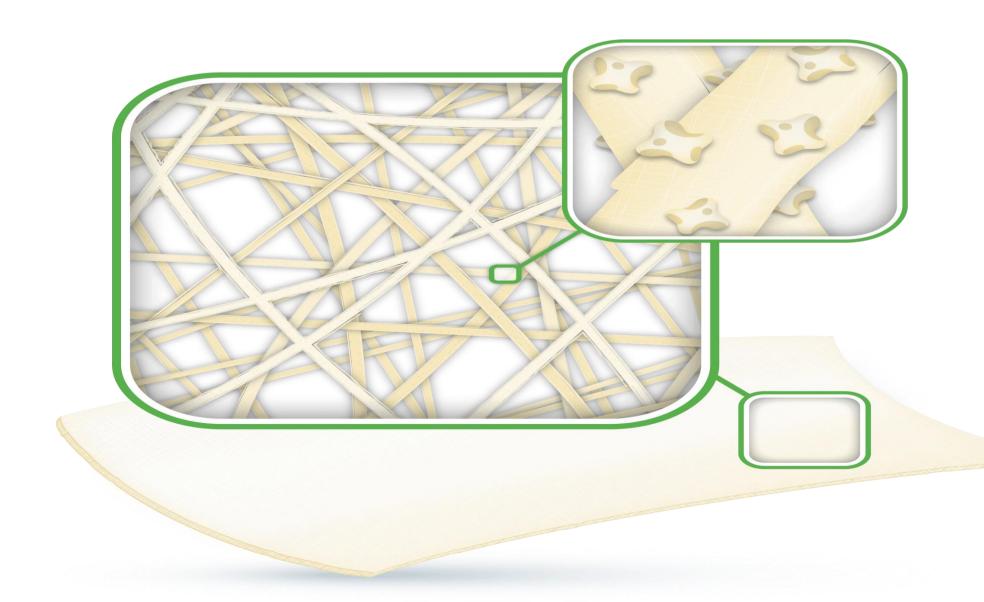
Wound infection is without doubt the most troubling of all wound complications. Non healing wounds are a significant burden to healthcare systems, where it is estimated that 4-5% of the adult population has a problem wound at any one time (Guest el al, 2017). The development of a wound infection can have potentially serious complications for patients. As well as delaying healing, wounds can rapidly deteriorate and, if left untreated, patients are at risk of septicaemia and death (Newton, 2010). Accurate wound assessment is essential to detect early changes within the wound, surrounding skin, which may indicate a rise in bacterial levels. Infection is apparent when the sum of bacterial load and the virulence factors the bacteria produce are greater than the host's immune defences, resulting in harm to the host. These are seen as the classic signs if infection (Swanson et al, 2014).

Topical antimicrobial silver has been used for hundreds of years in wound care. Topical antiseptics, such as silver, differ from antibiotics as they have multiple sites of antimicrobial action on target cells and therefore a low risk of bacterial resistance (Wounds international, 2012).

Advanced Medical Solutions has a new antimicrobial fibre dressing in the ActivHeal range as ActivHeal Aquafiber Ag, which includes both a flat and ribbon format to address the clinical needs of patients. The dressing releases silver ions in the presence of wound exudate and is effective antimicrobial agent against a broad spectrum of microorganisms frequently associated with bacterial colonisation and infection of wounds, for up to 7 days. The case study will explore the management of the abscess wound using ActivHeal Aquafiber Ag.

Method

Patient MB1, is a 55 year old man who was seen following an admission with cellulitis and presented to the Tissue viability team with cellulitis to the left lower leg. A full assessment was undertaken.



Results

Initial assessment the wound measured the length of the full lower limb a long with the width of the limb and had a circumference of 28cm. The leg was covered with 100% sloughy tissue and high levels of exudate. The wound showed clinical signs of infection of erythema, heat, oedema, increased levels of exudate and oedema. The patient's pain score using a visual analogue scale was 5. ActivHeal Aquafiber Ag ribbon was applied as part of the treatment regime to reduce wound bioburden and manage exudate. The dressing was applied to the wound and covered with a secondary dressing. The dressing change was daily due to the high levels of exudate. The patient was also commenced on antibiotics.

The ActivHeal Aquafiber Ag was selected to assist in reducing the risk of wound bioburden, absorb levels of exudate, maintain a moist wound environment, and promote healing. Significant progress was then noted in the wound, with the wound reducing in size and showing wound progression and a reduction in the clinical signs and symptoms of infection.



Wound at initial assessment

Significant progress was noted in the wound, with the exudate levels significantly reducing, the wound reducing in size and showing wound progression and a reduction in the clinical signs and symptoms of infection. The wound still showed signs and symptoms of infection, of erythema, heat, and oedema, but they had reduced along with the levels of exudate indicating that the bacterial bioburden was reducing. Exudate levels were now moderate however the peri wound skin was not macerated but remained inflamed. Due to the wound progression and reduction in clinical signs of infection the ActivHeal Aquafiber Ag was discontinued and the patient was ready for discharge. The patient no longer required an antimicrobial dressing.

Wound at week 1



Conclusion

The ActivHeal Aquafiber Ag was found to be an appropriate dressing in the management of the abscess wound with moderate to high exudate levels. The dressing produced very positive patient outcomes. The correct dressing choice in this case enabled the patient to be managed quickly and effectively without an overly long treatment time and assisted in the management of clinical indications of exudate management and to prevent wound bioburden along with being safe and acceptable to the patient. The case study illustrates the importance of a holistic approach when caring for a patient with a challenging wound and ensuring that the correct diagnosis is made based upon a thorough assessment ensuring good clinical outcomes for the patient.

References

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