

The management of a surgical incision and drainage of abscess using ActivHeal® AquaFiber Ag

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Background

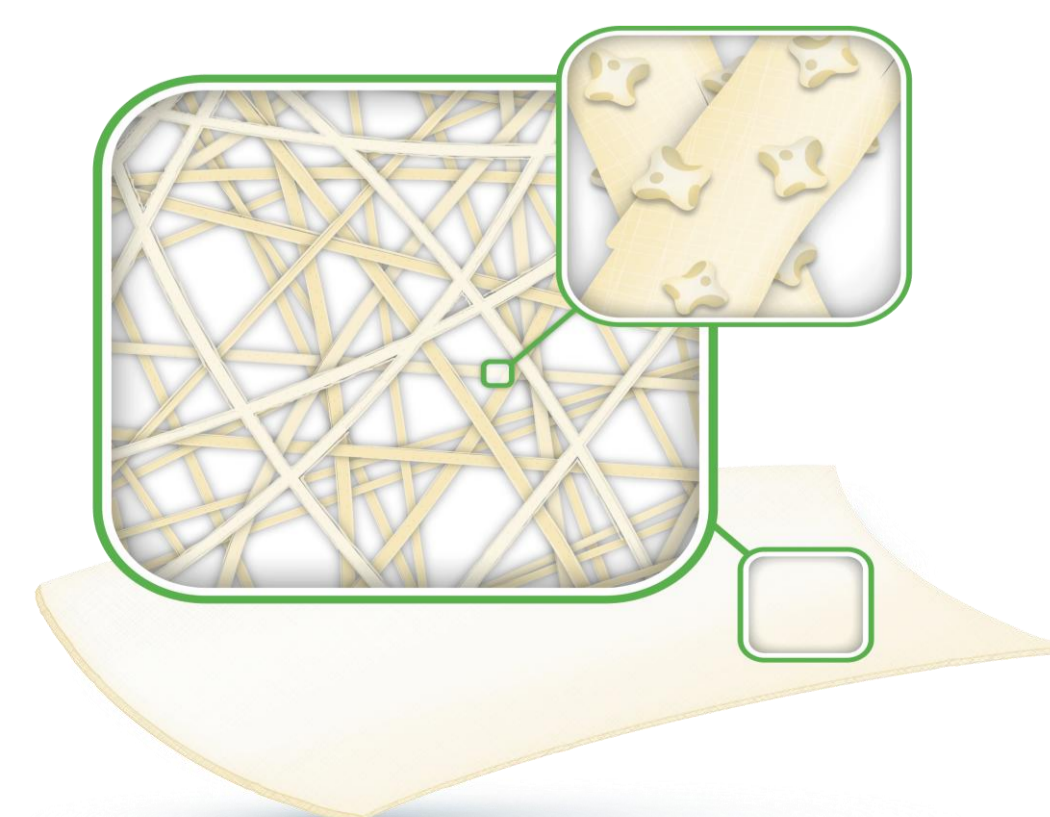
Non healing wounds are a significant burden to healthcare systems, where it is estimated that 4-5% of the adult population has a problem wound at any one time (Guest et al, 2017). The development of a wound infection can have potentially serious complications for patients. As well as delaying healing, 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 of 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 MB, is a 55 year old lady who was seen following an Incision and drainage of abscess and presented to the Tissue viability team with a cavity wound to the left groin. A full assessment was undertaken.



Results



Wound at initial assessment

Initial assessment the wound measured 11.2cm in length, 2.2cm wide and 10.4cm deep and was covered with 5% necrotic tissue, 45% slough and 50% granulating tissue. The wound showed clinical signs of infection of erythema, heat, oedema, increased levels of exudate and abnormal discharge. ActivHeal AquaFiber Ag ribbon was applied as part of the treatment regime to reduce wound bioburden and manage exudate. The dressing was loosely packed within the wound and covered with a secondary dressing. The patient was also prescribed antibiotics. The dressing was changed daily due to the high levels of exudate. 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.



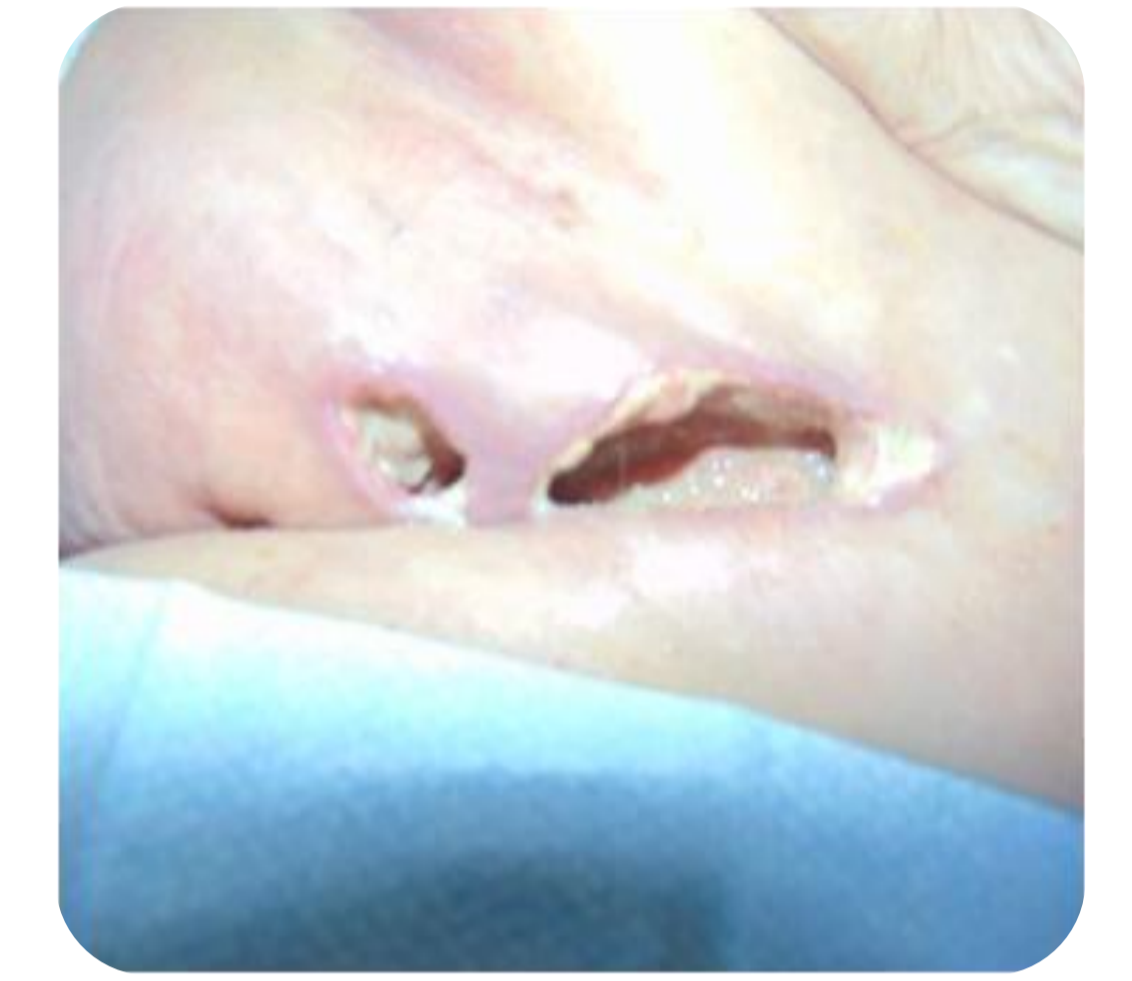
Wound at day 2

Significant progress was then noted in the wound, with the wound showing wound progression and a reduction in the clinical signs and symptoms of infection. All necrotic tissue had been removed and there were signs of new granulating tissue (60%) and 40% sloughy tissue. The wound size remained the same. The wound still showed signs and symptoms of infection, of erythema, heat, oedema and abnormal discharge, but they had reduced along with the levels of exudate indicating that the bacterial bioburden was reducing. Exudate levels were high however the peri wound skin was not macerated but remained inflamed. ActivHeal AquaFiber Ag ribbon was reapplied along with an absorbent foam secondary dressing



Wound at day 6

The wound measured 11.2 long, 2.2cm wide and 10.2 cm deep. The wound continued to show progression and the dressing assisting with the facilitation of debridement of sloughy tissue with the amount of sloughy tissue reducing to 20% sloughy tissue and 80% granulation tissue. The wound still showed signs of infection of erythema, heat, oedema, and abnormal discharge although of less severity. Therefore, indicating that the ActivHeal AquaFiber Ag was assisting in reducing bacterial bioburden of the wound. The dressing regime continued.



Wound at day 9

The wound measured 11.2 cm long, 2.2cm wide and 9.9 cm deep. The wound had progressed to 10% slough and 90% granulating tissue. The wound still showed some signs of infection. Exudate levels had reduced and no signs of maceration. ActivHeal AquaFiber Ag dressing had assisted in reducing bacterial bioburden and levels of exudate and assisted in the autolytic debridement of devitalised tissue. The dressing was discontinued and NWTP was applied.

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

- Guest, J., Ayoub, N., McIlwraith, T. et al (2017) Health economic burden that different wound types impose on the UK's National Health service. *International Wound Journal*. 14 (2): 322-30. <https://doi.org/10.1111/iwj.12603>.
- Newton, H. (2010) Reducing MRSA bacteraemias associated with wounds. *Wounds UK* 6 (1): 56-65.
- Swanson, T., Grothier, L., Schultz, G. (2014) Wound Infection made easy. *Wounds International*. Available from: www.woundsinternational.com
- Wounds International (2012) International consensus. Appropriate use of silver dressings in wounds. An expert working group consensus. London. Wounds International, 2012. Available to download from www.woundsinternational.com