

# The Management of a Skin Tear using ActivHeal® Silicone Wound Contact Layer

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## Background:

Wound contact layers are fundamental in wound management. The potential to cause trauma to the wound bed and peri wound skin at dressing removal is known to increase pain, the size of the wound and to delay healing (Hollingworth and White, 2006). Acute traumatic skin injuries are increasing with patients having multiple co morbidities, complex medication regimes and increasing age, all contributing to the risk of their occurrence (Bateman, 2012). Skin tears should be acknowledged as a significant wound aetiology that has a high risk of complication, increasing patient morbidity and mortality (Stephen- Haynes and Carville, 2011). A skin tear is a traumatic wound where separation of the skin layers occur (Fleck, 2007). The epidermis and dermis are connected at the dermo- epidermal junction via ridges that knit the two layers together. This area can become flattened, weakened with age and disease, producing a vulnerable instability to the body's protective layer (Bateman, 2012). Damage to the skin and underlying tissues pose an increasing challenge to the clinician and the patient and have a detrimental effect on the patient through increased pain, scarring and reduction in quality of life. As clinicians we need to have a good knowledge of the physiology of wound healing and assessment of the wound and peri wound skin as part of holistic wound management to choose appropriate, atraumatic dressings both to protect the sensitive peri wound skin from being exposed to moisture and preserve its integrity at dressing changes.

## Method:

A 88 year old lady was admitted to an Acute Hospital within the UK following a fall where she sustained traumatic wounds to the left upper arm, left leg and head. She had a past medical history of atrial fibrillation and was on Warfarin. The patient lived at home alone. The patient was taken to theatre on admission to have wounds washed out and skin flaps put back in place. Tissue viability input was required day 5 post operatively.

For this particular case study the wound that will be focussed on was the left arm wound which was classed as a Category 1b skin tear from the STAR skin tear classification system (Carville et al, 2007). The wound measured 10cm in length, 6cm in width and 0.2cm depth. The wound had moderate levels of exudate and 100% granulation tissue.

## Results:

Following a full assessment the wound would be managed using the ActivHeal Silicone wound contact layer dressing along with a non bordered foam to absorb exudate and a bandage to retain the dressing. (Picture 1) The dressing was selected to allow for undisturbed wound healing, prevent peri wound skin damage and reducing the risk of complications, promote healing, provide a moist wound environment and minimising pain, discomfort and trauma at dressing changes. Reducing potential mechanisms for pain can help promote patient comfort and improve clinical outcomes (Richardson and Upton, 2010). Unfortunately at the 2<sup>nd</sup> dressing change part of the skin flap had become non viable. Exudate levels increased to moderate and there was 70% granulating tissue, 20% necrotic and 10% slough. (Picture 2) The wound size remained the same. Honey and the silicone wound contact layer were used along with a foam and bandage. Wound contact layers can assist with both positive and negative aspects of exudate control, as well as allowing excess fluid to be led away from the wound bed into the secondary dressing and acting as barrier between the wound bed and the absorbent dressing. Silicone wound contact layers can also assist in promoting the growth of granulation and epithelial tissue (Benbow,2002). It is vital that steps are taken to control exudate, ensure pain free dressing changes, and keep the peri wound skin intact. The dressing was to be left for 4 days to aid autolytic debridement.

Significant progress was then noted in the wound, with the wound reducing in size and showing wound progression. At the third dressings change the necrotic tissue had been autolytically debrided and there was 70% epithelial tissue and 10% granulation with an area of sloughy tissue (20%) (Picture 3).

At the fourth and final dressing change prior to discharge of the patient further significant progress had been made. The wound had reduced in size, exudate levels were low and 70% epithelial tissue and 30% granulation tissue was visualised. (Picture 4) This was attributed to the dressing providing a moist wound healing environment whilst offering protection to the peri wound skin. The patient dressing regime continued and the patient was discharged.



Picture 1



Picture 2



Picture 3



Picture 4

## Discussion:

This case study demonstrated positive effects in clinical practice. The ActivHeal Silicone wound contact layer was easy to apply and remove and enabled pain free dressing changes whilst maintaining a moist wound environment, protecting the peri wound and conformed well to the patients wound. All good attributes of silicone wound contact layer as it enabled the clinician to apply effective therapies to the patients wound without causing trauma to the wound bed or to the surrounding skin. This assisted in helping improve the patients quality of life, and reducing patient anxiety

## Conclusion:

The correct dressing choice in this case enabled the patient to be managed quickly and effectively without an overly long treatment time. Exudate control, pain management and care of the peri wound skin were paramount. 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:** Bateman, D. (2012) Treating skin tears with a new antimicrobial foam dressing. Wounds UK. Vol 8 (1) 95-9. Benbow, M. (2002) Urgotul : alternative to conventional non adherence dressings. British Journal of nursing. 11 (2): 135-38. Carville, K. Lewin, G. Newall, N. Haslehurst, P. Michael, R. Santamaria, N. Roberts, P. (2007) STAR: A consensus for skin classification. Primary Intention. 15 (1) 18-28. Fleck, C. (2007) FAQ's: Preventing and treating skin tears. Advanced Skin Wound Care. 20 (6): 315-21. Hollingworth, H. White, R (2006) The clinical significance of wound pain. In White, R. Harding, K. (eds) Trauma and pain in wound care. Wounds UK. Aberdeen. 3-16. Richardson, C. Upton, D. (2010) A discussion of the potential mechanisms for wound dressings' apparent analgesic effects. Journal of Wound care. 19 (10): 424-30. Stephen- Haynes, J. Carville, K. (2011) Skin tear Made Easy. Available at: <http://ly/lomPE64>.