

# New ActivHeal® Silicone Foam Dressing On A Category 4 Pressure Ulcer To The Outer Right Knee.

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## Background:

The selection of any dressing is dependent on a thorough and holistic assessment determining the cause of the wound, addressing any underlying factors that hinder healing and assist in preparing the wound bed for healing. As clinicians we need to have a good knowledge of the physiology of wound healing and an understanding that dressings do not heal wounds, but can influence and address issues in wound environment. Changes in the skin can occur throughout a person's lifetime when subjected to a large number and variety of insults, both internal and external, that may affect either its structure or function. In healthy individuals skin is strong, resilient and will repair itself, however, skin may be subject to changes that result in it becoming vulnerable, impaired and dysfunctional. Some of these changes are intrinsic, such as the effects of skin conditions, ageing or underlying illness, and some are extrinsic, such as environmental damage (Lawton & Langoen, 2009). Wound care products should minimise pain and damage on removal, as well as being comfortable.

## Method:

A 45 year old lady was admitted to an Acute Hospital within the UK with multiple pressure ulcers along with poor nutrition and faecal impaction. She had no other past medical history to note. The patient lived at home with her husband. On presentation the lady had numerous pressure ulcers varying in degree of severity and size. The majority were full thickness with hard necrotic eschar.

For this particular case study the wound was a 3 week old Category 4 pressure ulcer to the outer right knee. The wound was fully assessed.

## Results:

The wound had full thickness tissue loss and had granulating tissue (60%) with an area of slough (40%). The wound measured 4.5cm in length, 2.5cm width and 2.5cm depth. The levels of exudate were high, the surrounding skin had areas of erythema, but no maceration or excoriation was observed. A category 4 pressure ulcer was diagnosed.

Following a full assessment the wound would be managed using an ActivHeal® Alginate fibre to manage exudate, promote autolytic debridement, and provide an optimum moist wound healing environment. The new ActivHeal® Silicone foam dressing is a three layer polyurethane foam with a silicone perforated adhesive wound contact layer. The dressing was applied as a secondary dressing to manage exudate, prevent peri wound skin damage and reduce the risk of complications, promote healing, provide a moist wound environment and minimise pain, discomfort and trauma at dressing changes.

The repeated application and removal of adhesive dressings can cause damage to the layers of the stratum corneum, and may cause inflammation, oedematous changes, skin soreness, and have a detrimental effect on skin barrier function (Dykes et al, 2001; Lawton & Langoen, 2009). The patient was also afraid of the dressing removal and it's pain and discomfort. It is important that clinicians minimise pain and discomfort on removal of dressings as it is vital to the overall health and quality of the patient. The new ActivHeal® silicone foam was removed without any discomfort or pain to the patient. The dressing was changed every 2 to 5 days.

Significant progress was noted in the wound along with the management of pressure ulcers measures, ensuring that all contributory causes relating to the pressure ulcer had also been addressed. After two weeks, the wound had improved significantly. There was a reduction in wound size, with the wound measuring 1cm, width 1cm and a depth of <0.5cm. Following a wound bed assessment there was now 20% granulating tissue and 80% epithelial tissue. The exudate level had reduced to low to moderate and there were no signs of maceration or excoriation indicating that the exudate was being managed well by the dressings. At this time the patient was discharge for rehabilitation, however the patient was readmitted on the 2nd April however the wound was completely healed.



## Discussion:

The common goal for the management of this wound was the management of excess exudate; peri wound skin protection and healing alongside the promotion and maintenance of patient comfort and quality of life. Reducing the potential mechanisms for pain can help promote patient comfort and improve clinical outcomes (Richardson and Upton, 2010). In regards to patient satisfaction the patient rated the performance of the dressing as 'very satisfied'. The silicone adhesive enabled the clinician to apply effective treatment to the patient's wound without causing trauma to the wound bed or to the surrounding skin. This helped improve the patient's quality of life, reduce anxiety, and improve concordance with treatment.

## Conclusion:

The correct dressing choice in this case meant that the patient despite having intensive and complex wounds was managed quickly and effectively without an overly long treatment time. 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 a favourable outcome for the patient. The case study also demonstrates that the new ActivHeal® silicone foam is able to deliver good quality clinical outcomes for both the patient and the clinician.

## References:

- Lawton, S. Langoen, A. (2009) Assessing and managing vulnerable peri wound skin. World Wide Wounds. <http://www.worldwidewounds.com/2009/october/lawton-Langoen/vulnerable-skin-2>
- Richardson, C. and Upton, D. (2010) A discussion of the potential mechanism for wound dressings' apparent analgesic effects. Journal of Wound Care. 19 (10) 424-30.