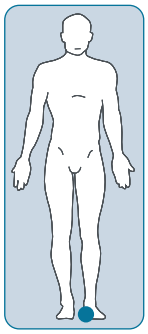
ACTICOAT◊ FLEX 3 Antimicrobial Barrier Dressing on a non-healing complex foot ulcer.



Author: Georgina Edwards Highly Specialist Podiatrist for Complex Lower Limb and Foot, Gloucestershire Health and Care NHS Foundation Trust

Presentation

This case study outlines a collaborative approach to care between podiatry, community nursing and tissue viability teams. Podiatry have led on the care in the last year and a half and have provided reviews every 2-4 week with remote support from tissue viability as required while the community nurses have attended three times per week. This case is structured around two-weekly review intervals since commencing ACTICOAT FLEX Dressing. The patient, a 39-year-old with a medical history of Spina Bifida and Hydrocephalus, Lymphoedema, and wheelchair dependency. Treatment focused on a healing category 4 pressure ulcer on the left heel that had remained unhealed for nine years.

At the initial Podiatry assessment, the patient's pressure ulcer was assessed as static (non-healing). The wound measured 4.3cm (length) x 4.7cm (width) x 0.5cm (depth), with evidence of undermining between 3 and 9 o clock. The wound bed presented with 100% granulation tissue, though it was friable, bleeding easily and profusely upon contact. The patient had a history of recurrent soft tissue infections, accompanied by chronic odour and dark, unhealthy granulation tissue, all indicative of infection. Additional signs and symptoms included discharge, oedema, and delayed healing. Exudate levels were moderate, and the patient reported a pain score of 1 out of 10 (10 being the highest) (Image 1).

At the time, the top three issues impacting the patient were:

- Previous recurrent infections requiring antibiotics, chronic odour, and previous episodes of osteomyelitis.
- Bleeding and discharge – resulting in frequent dressing changes and involvement of multiple services.
- Impact on social life with visits/appointments and, fair to say, impact on mental wellbeing.

No wound swab was taken during this assessment, and the patient was not receiving antibiotics. Dressings were being changed three times per week.

Following the assessment, ACTICOAT FLEX 3 Dressing was suggested by the Tissue Viability Nurse to help manage the bacterial burden,[1-2] and help prevent and minimise the risk of infection,[3-6] and prevent biofilm reformation.[7-9*]

Treatment

After just over a week (9 days) of treatment with ACTICOAT FLEX 3 Dressing, with dressing changes every 72 hours as per the instructions for use, the wound was reassessed by the podiatrist and noted to be improving. The ulcer had already reduced in size to 3.0cm (Length) x 4.5cm (Width) x 0.3cm (Depth), with no visible undermining. The wound bed remained 100% granulating, but appeared much healthier, with no signs or symptoms of infection (Image 2).

Graph 1: Below shows how ACTICOAT FLEX Dressing positively influenced the wound's healing trajectory, resulting in complete closure.

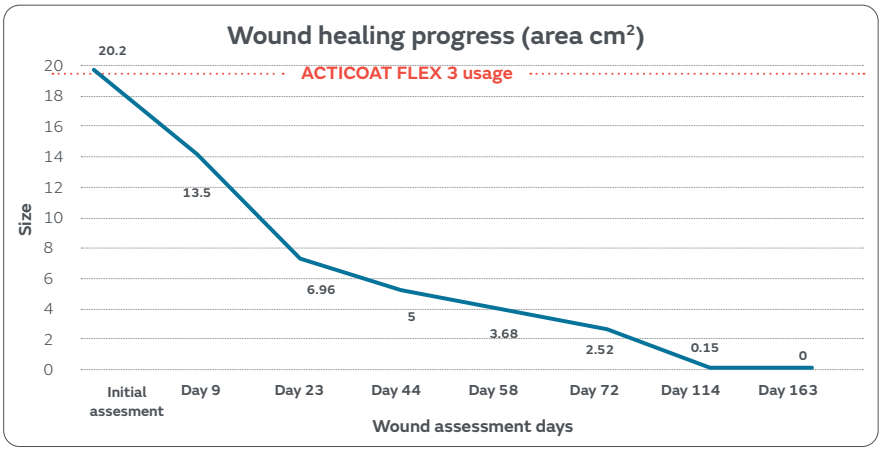


Table 1: ACTICOAT FLEX 3 Dressing resolved all signs and symptoms of infection after 9 days (Day 0 – Day 9). ACTICOAT FLEX 3 Dressing used (Day 0 – Day 114)

Day	Wound dimensions	Reason for ACTICOAT
Initial assessment (Image 1)	4.3cm (length) x 4.7cm (Width) x 0.5cm (depth) **Area cm² = 20.2**	Wound assessed as showing signs of infection
Day 9 (Image 2)	3cm (length) x 4.5cm (width) x 0.3cm (depth) **Area cm² = 13.5**	All signs and symptoms of Infection resolved
Day 23 (Image 3)	2.4cm (length) x 2.9cm (width) x 0.5cm (depth) **Area cm² = 6.96**	Clinical Judgment to continue based on wound dimensions
Day 44 (Image 4)	2.5cm (length) x 2cm (width) x 0.5cm (depth) **Area cm² = 5**	Clinical Judgment to continue based on wound dimensions
Day 58 (no Image)	2.3cm (length) x 1.6cm (width) x 0.5cm (depth) **Area cm² = 3.68**	Clinical Judgment to continue based on wound dimensions
Day 72 (Image 5)	1.8cm (length) x 1.4cm (width) x 0.3cm (depth) **Area cm² = 2.52**	Clinical Judgment to continue based on wound dimensions
Day 114 (Image 6)	0.5cm (length) x 0.3cm (width) x 0.1cm (depth) **Area cm² = 0.15**	ACTICOAT FLEX 3 Dressing stopped, ALLEVYN◊ GENTLE BORDER applied
Day 163 (Image 7)	**Area cm² = 0**	Healed

Initial assessment

Image 1: 4.3cm (length) x 4.7cm (width) x 0.5cm (depth) Undermining between 3 and 9 o'clock. Dark, unhealthy granulation tissue, signs of infection present

Day 9

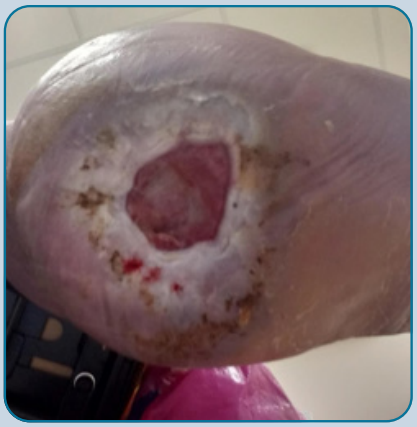


Image 2: 3cm (length) x 4.5cm (width) x 0.3cm (depth) no signs and symptoms of infection. No undermining, 100 granulation tissue present

Day 23

Image 3: 2.4cm (length) x 2.9cm (width) x 0.5cm (depth)

Day 44

Image 4: 2.5cm (length) x 2cm (width) x 0.5cm (depth)

Day 72

Image 5: 1.8cm (length) x 1.4cm (width) x 0.3cm (depth)

Day 114

Image 6: 0.5cm (length) x 0.3cm (width) x 0.1cm (depth)

Day 163

Image 7: Healed

Results may vary

HCP Testimonial

The Podiatry team had been involved in this patient's care on and off for around 7 years prior to them coming into my clinic; I then worked with the patient for around a year, prior to starting ACTICOAT◊ FLEX 3 Dressing though the wound made very little improvement during this time despite trying multiple different dressing regimes and overall there was only around a 10mm reduction in the size during this time (the wound had deteriorated during this time as well).

The patient had no arterial concerns and had been assessed by the vascular team and following their assessment compression therapy was initiated to help manage the chronic oedema. There was evidence on imaging of chronic osteomyelitis, though no bone had been exposed for 2 years, and the patient had been assessed by the orthopaedic team.

I think I can speak for all teams involved and the patient when I say we felt we had exhausted all options and that the results from using ACTICOAT FLEX 3 Dressing have been astounding. All teams involved and the patient were very surprised at the significant improvement to the wound in a relatively short amount of time given we had tried multiple regimes over the years which had little impact. This was a really positive experience for the patient and all teams involved.

Smith+Nephew

Summary

The patient in this case study had been living with a chronic wound for nearly 9 years, experiencing recurrent infections and requiring intensive community nursing and podiatry support, typically three visits per week, each lasting approximately 30 minutes. Despite various standard interventions, the wound remained non-healing. Following advice from tissue viability ACTICOAT◊ FLEX 3 dressing was initiated due to concerns regarding chronic bioburden and biofilm, resulting in the resolution of clinical signs of infection and significant improvement to the wound bed and wound dimensions within 9 days. Although silver dressings are generally recommended for short-term use, the decision to continue was based on the wound's positive response and in the patient's best interest. This approach led to complete wound healing in 163 days, after nearly a decade of a non-healing wound. This outcome not only improved the patient's quality of life but also reduced the long-term burden on nursing services. With the wound fully healed, nursing hours decreased. This case demonstrates the importance of flexible, patient-centred care approach, where clinical judgment can lead to great wound outcomes.

ACTICOAT◊ FLEX 3

Antimicrobial Barrier Dressing

Acknowledgements: Images used with permission from Georgina Edwards Highly Specialist Podiatrist for Complex Lower Limb and Foot, Gloucestershire Health and Care NHS Foundation Trust. Gemma McGrath Health Outcomes Manager contributed to the medical writing of this case study.

*As demonstrated *in vitro*

This case is provided for informational and educational purposes only. This case may not represent typical outcomes. Each patient undergoing wound treatment represents unique sets of circumstances and, therefore, results may vary. Smith+Nephew does not provide medical advice. The information presented is not, and is not intended to serve as, medical advice. It is the responsibility of the treating physician to determine and utilise the appropriate products and techniques according to their own clinical judgment for each of their patients.

References 1. Glik J, Labus W, Kitala D, et al. A 2000 patient retrospective assessment of a new strategy for burn wound management in view of infection prevention and treatment. Int Wound J. 2018;15(3):344 - 349. **2.** Sibbald GR, Contreras-Ruiz J, Coutts P, Fierheller M, Rothman A, Woo K. Bacteriology, Inflammation, and Healing: A Study of Nanocrystalline Silver Dressings in Chronic Venous Leg Ulcers. Adv Skin Wound Care. 2007;20(10):549 - 558. **3.** Gago M, Garcia F, Gaztelu V, Verdu J, Lopez P, Nolasco A. A comparison of three silver-containing dressings in the treatment of infected, chronic wounds. Wounds. 2008;20(10):273 - 278. **4.** Tredget EE, Shankowsky HA,Groenveld A, Burrell RE. A matched-pair, randomised study evaluating the efficacy and safety of ACTICOAT silver-coated dressing for the treatment of burn wounds. J Burn Care Rehabil. 1998;19(6):531 -537. **5.** Chaloner D, Stevens J. A comparative study of two silver containing dressings, ACTICOAT 7 and Avance, in the treatment of chronic venous ulcers. Poster presented at: WUWHS2004; Paris. **6.** Gravante G, Caruso, R., Sorge, R., Nicoli, F., Gentile, P. and Cervelli, V. Nanocrystalline silver: a systematic review of randomized trials conducted on burned patients and an evidence-based assessment of potential advantages over older silver formulations. Annals of plastic surgery. 2009; 63:201-205. **7.** into the ability of ACTICOAT and ACTICOAT Absorbent to prevent the formation of bacterial biofilms in vitro. Internal Report. DOF 0512011. **8.** Smith+Nephew 2008. ACTICOAT Flex prevents the formation of biofilms. Internal Report. DOF 0812024. **9.** Driffield K, Woodmansey E, Floyd H. The use of silver-containing dressings to prevent biofilm formation by single and mixed bacterial flora. Poster presented at: Symposium on Advanced Wound Care (SAWC)2006.

Smith+Nephew Croxley Park, Building 5, Hatters Lane, Watford Hertfordshire WD18 8YE T +44 (0)1923 477100 F +44 (0)1923 477101
Smith+Nephew, Kay Fiskers Plads 9, 2300 København S, Denmark T: +45 45 80 61 00 | Smith+Nephew, Krokslätts Fabriker 39, 431 37 Mölndal, Sweden T: +46 31 74 65 800
Smith+Nephew, Snarøyveien 36, 1364 Fornebu, Norway T: +47 66 84 20 20 | Smith+Nephew, Lentäjäntie 1, 01530 Vantaa, Finland T: +358 (0)207 866 333
47604-ukinor 0925. Published September 2025.