

# ActiFormCool®: A useful adjunct to aid wound healing and reduce wound pain.

Mrs Fiona Brockwell, Tissue Viability Nurse, Buckinghamshire PCT.

## Introduction

There is now evidence to show that venous leg ulcers can cause considerable pain (Hofman D, 1997) and there are many dressings that relieve pain at dressing change (Hollinworth, 2002). However it is important to offer pain relief between dressing changes and throughout the healing process.

## Aim

The author will present two case studies, which describe the role of ActiFormCool® sheet hydrogel in reducing pain and promoting wound healing in two patients with chronic leg ulceration.

## Methods

The author will describe the advancement of recalcitrant leg ulcers in two patients. Both patients reported constant wound pain prior to the use of ActiFormCool. Hollinworth & White (2006) propose patient's pain may be given a low priority and that practice will only change if all professionals engage in care strategies proven to minimise trauma and pain in wound care. (Hollinworth & White (2006)

By following the progress of the two patients in these case studies, the author will describe the advancement of recalcitrant leg ulcers. Both patients had reported constant wound pain, with one patient requiring opiates to help her cope with the pain. Both patients reported reduction in pain to the extent that they no longer required analgesia.

## Patient 1

The patient is a 68 year old female. This patient has had her ulcer for almost 2 years.

A comprehensive leg ulcer assessment was undertaken. The ABPI was 0.8.

No predominant features of arterial insufficiency were identified.

Time Scale	Ulcer Dimensions	Tissue Type	Infection/ Inflammation	Moisture	Pain Scale
At presentation	8cm x 6cm Unable to determine depth	Thick adherent slough	Inflammation of peri-wound skin	Moderate purulent exudate	8
1 week	12cm x 9cm x 0.5 deep Granulation tissue evident	Majority of debridement accomplished	Peri-wound Inflammation persists	Moderate purulent exudate	6 Unable to tolerate reduced compression
4 weeks	12cm x 9cm x 0.3 deep	90% granulation tissue 10% new epithelium	Discoloration at edge with some excoriation.	Large amounts of serous exudate	4 Able to introduce compression
6 weeks	12cm x 8cm deep approx 0.3cm	Granulation tissue fills the wound bed	Increased peri-wound inflammation on wound. Swab confirms streptococci infection and antibiotics commenced	Exudate increased Increasing malodour	Remains 4 Despite wound infection
4 months	6.5cm x 2 cm superficial	New epithelium at edge and wound contracture	No signs of inflammation	Minimal exudate	0
15 weeks	3cm x 1.5cm covered with new epithelium	Majority of ulcer	None	Minimal	0



At presentation ulcer measured 8cm x 6cm.

Ulcer at 1 week.

Ulcer at 4 weeks.



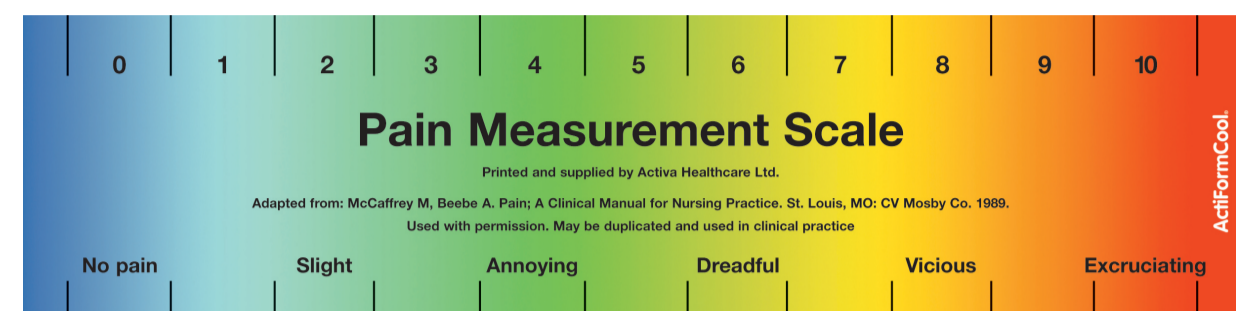
Ulcer at 6 weeks.

Ulcer at 4 months.

Ulcer at 5 months.

By using ActiFormCool® the author was able to facilitate an environment conducive to wound healing. This lady reported for the first time in 2 years she was able to go on holiday to Barbados without a suitcase full of bandages and painkillers.

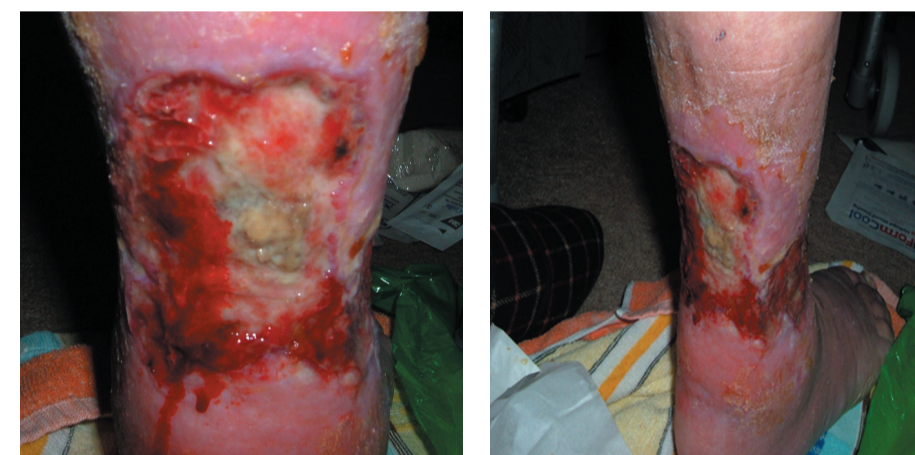
An example of a visual analogue scale



0 signifies no pain increasing to 10 extreme unbearable pain.

## Patient 2

The patient is an 89-year-old lady who has a 4-year history of arterial ulcers her ABPI is 0.6. She has declined vascular surgery. Visual analogue pain scales reported pain as being 9 at dressing changes. Morphine sulphate is used as analgesia prior to dressing changes. This patient had given up hope of the ulcer improving. 2/3 of the gaiter area is covered in deep sloughy ulcerated tissue measuring approximately 10cm x 15cm. Surrounding skin is macerated and the wounds are malodorous and heavily exuding.



1 week after ActiFormCool® commenced.

At 1 month the patient is no longer requiring opiates. Amitriptylline has been commenced to reduce neuropathic pain. The patient reports no pain at dressing changes. There is evidence of new granulation tissue in the wound bed and a new bridge of epithelium separates the ulcerated areas. The 2 ulcerated areas measure 6cm x 5cm and 4cm x 3cm respectively.

This patient's attitude towards her ulcers has changed. She is sleeping and has now begun to leave the home using a scooter. Prior to this she would not leave the home environment.

The use of photography and wound measurement has enabled this author to demonstrate significant improvements in wound dimensions, exudate levels, pain scales and independence for both these patients as a result of appropriate wound management using ActiFormCool® as a primary dressing.



1 month of ActiFormCool®.

2 months of ActiFormCool®.  
Bridging of epithelium.

## Discussion

EWMA (2002) advocate strategies for the relief of pain at dressing changes, which include maintaining a moist environment, minimise pain and trauma on dressing removal and maximising time dressings are insitu. Using ActiFormCool® hydrogel enabled these principles to be followed and as a result one leg ulcer has healed and the other is showing significant signs of healing. Additionally, pain was reduced not just at dressing change, but throughout the treatment time.

## References

- EWMA (2002) Pain at wound dressing changes. Position document. www.ewma.org
- Hofman D, Ryan TJ, Arnold F et al (1997) Pain in venous leg ulcers. JWC; 6; 5: 222-4
- Hollinworth H (2002) How to alleviate pain at wound dressing changes. NT Plus; 98;44
- Hollinworth H, White R (2006) Trauma and pain in wound care book, White and Harding, Wounds UK