

# Use of superabsorbent and antimicrobial dressings under compression

Agnes Collarte & Zoe Lear, St Charles Hospital. Tissue Viability Department. Complex Wound Clinic, World's End Health Centre, London.



Fig 1. Case study 1 Flivasorb® on removal medial view



Fig 2. Case study 1 Flivasorb® on removal lateral view



Fig 3. Case study 1 Suprasorb® X+PHMB in situ showing conformability of dressing medial view



Fig 4. Case study 1 Suprasorb® X+PHMB in situ showing conformability of dressing lateral view

## Introduction

A leg ulcer is often defined as a break in the skin on the lower leg that takes more than 4-6 weeks to heal. (Dale 1983) It is important for healthcare professionals and patients to understand the cause of the ulcers so that they are able to treat them effectively. This poster details the experiences of a clinic in North London. Simple non-adherent dressings are often advocated for treatment of leg ulcers under compression. However, if pain and infection cannot be diminished, the patient can be non compliant.

## Case Study 1

Mrs D. suffered a leg trauma from a trolley knock in May 2009. This was a circumferential leg ulcer that was sloughy and heavily exuding. On a subjective assessment scale of 0-10, exudate was 10. Pain was intermittent. Mrs D was originally seen and treated by her practice nurse for 10 months. Then referred to Tissue Viability Nurse in March 2010. Previous products used were Aquacel Ag, a hydro fibre silver dressing, Ichtopaste, paste bandage and Sorbion, a superabsorbent dressing. Typical wear time was 48 hours. Mrs D was, at this stage, using plastic bags over her dressings to contain the exudate.

## The Challenges

To manage very heavy exudate and to treat critical colonisation. Mrs D was unable to tolerate Doppler Assessment due to extreme pain when the cuff was pumped.

## Method

Flivasorb® was applied to the wound in order to manage the heavy exudate (Fig 1 & 2). Tubigrip elastic tubular bandage was applied as a retention method. Flivasorb® is a superabsorbent wound dressing with twice as much absorption capacity compared to a traditional absorbent dressing and is used in the treatment of highly exuding wounds. It has low rewet (retain fluid within the dressing to prevent maceration) binding exudate firmly inside the core with fixed superabsorbent particles (Steinlechner 2008). Following the use of Flivasorb® to manage the exudate, Suprasorb® X+PHMB was used (Fig. 3 & 4) for cooling, soothing and to treat infection. Suprasorb® X+PHMB is a hydrobalance dressing containing polyhexamethylene biguanide, a safe and effective antimicrobial agent (Kingsley et al 2009).

## Results

After 48 hours most of the debris within the exudate had been absorbed into the Flivasorb®; there was less maceration and the exudate was contained. The patient did not have to wear plastic bags on her leg.

## Case Study 2

FS has multiple sclerosis and hypertension and venous leg ulceration for 8 months in the gaiter area of the left leg. Previous products used were Aquacel, a hydro fibre dressing and surgipads, an absorbent dressing. These dressings were changed three times a week.

## The Challenge Maceration.

## Method

Following the full holistic and vascular assessment to establish safety to compress, Flivasorb® was applied as the contact layer underneath Actico® inelastic cohesive bandage system with therapeutic working and tolerable resting pressures. Actico® has been shown to be effective in the management of venous disorders and to be acceptable to patients (Franks et al 2004).

## Results

Dressing changes were reduced from 3 times a week down to twice a week with no signs of maceration. Flivasorb® was continued for four weeks and the patient was healed.

## Case Study 3

AW had 2 ulcers of mixed aetiology for a duration of 7 weeks. The skin was fragile with maceration; previous dressings used were Aquacel and Aquacel Ag. The dressing was being changed three times a week.

## Method

Flivasorb® was used under compression bandages (Actico®) as it has been shown to be effective in the management of mixed aetiology ulcers (Prytherch 2005).

## Results

Dressing changes down to twice weekly, with no further maceration. One ulcer has healed and the other ulcer is healing, with dressing changes down to once a week.

## Discussion

In all three case studies Flivasorb® reduced dressing changes and nurse time. It is effective in managing exudate and prevented any further maceration to the skin. Patients found Flivasorb® comfortable to wear and had made a big improvement in their quality of life.

## Conclusion

The intelligent use of dressings to manage exudate, handle infection and provide pain relief accompanied by the effective use of a good compression bandaging system allowed the nurses in this clinic to treat these complex patients and gain concordance.

## References

- Dale JJ et al.(1983) Chronic ulcers of the leg: a study of prevalence in a Scottish community. Health Bull (edin),41,310-4.
- Steinlechner E, Rohrer C, Abel M, (2008) Absorbent dressings with superabsorbent polymers – a new generation of wound dressings, Poster presentation 18th Conference of EWMA Lisbon.
- Franks P J, Moody M, Moffatt C J , Martin R, Blewett R, Seymour E, Hildreth A, Hourican C, Collins J, Heron A, (Wound Healing Nursing Research Group) (2004) Randomized trial of cohesive short-stretch versus four-layer bandaging in the management of venous ulceration, Wound Repair and Regeneration, 12: 157-162).
- Kingsley A, Tadej M, Colbourn A, Kerr A, Bree-Aslan C, (2009) Suprasorb® X+PHMB: antimicrobial and HydroBalance action in a new wound dressing, Wounds UK, 5, 1, 72-77.
- Prytherch 2005 Poster presentation at Wounds UK conference, Harrogate.