

# TOP TIPS ON THE USE OF FOAMS

Foam dressings have been used in wound management for more than 25 years and there are many different forms available. There are also myths that have evolved around the use of foam dressings and this article seeks to demystify them and highlight best practice.

**B**efore using any wound dressing, the clinician must ask themselves what they require from the dressing and question whether the particular foam will perform to their expectations.

## 1 DO FOAMS PROTECT AGAINST PRESSURE?

While it is widely supposed that foams do provide protection against pressure, there is little evidence to support this theory. Butcher and Thompson (2010), performed an exhaustive search and concluded that while some wound dressings may have the ability to reduce friction/shear forces, which contribute towards pressure damage, there was no conclusive evidence that any generic group of dressings could prevent pressure damage.

Brindle and Wegelin (2009) reported no statistical difference in a study of 100 subjects investigating whether or not sacral-shaped, silicone-coated foam dressings protected the sacrum from pressure damage when observed in

an intensive care situation. Heel-shaped foam dressings are purported to aid pressure ulcer prevention, however, this is likely to be due to the heel being protected from shear/friction (Benbow, 2011), and a film dressing would serve the same purpose, while also allowing the heel to be observed.

## 2 USE ON ALL WOUND TYPES

Foam dressing are designed to absorb excess exudate, therefore, should be used on exuding wounds of any description, e.g. pressure ulcers, leg ulcers and traumatic wounds, regardless of the type of tissue within the wound. However, significant differences have been found in the fluid-handling capabilities of varying foam dressings (Thomas, 2010) and it is vital that this is considered before use. The foam dressing must be efficacious in absorbing and retaining wound exudate to prevent maceration of periwound skin.

In recent years, many companies have introduced lighter foam

*'Significant differences have been found in the fluid-handling capabilities of varying foam dressings'*

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*‘There are no contraindications for the use of a foam dressing under compression’*

dressings, which are suitable for lightly exuding wounds and can remain *in situ* for several days. This reduces dressing change frequency for both patient and nurse, enabling both clinical and cost-effective care. Foam dressings are not appropriate for wounds containing dry necrotic tissue nor dry epithelialising wounds.

### 3 DRESSING CHANGE FREQUENCY

Foam dressings vary in their durability, i.e. how long the dressing remains *in situ*, which is dependant on how much fluid the dressing is able to absorb, and varies between foam dressings (Thomas, 2010).

### 4 CAN FOAM DRESSINGS BE CHANGED BY THE PATIENT/ CARER?

Provided that the patient/carer has been assessed as being physically able/capable and is well instructed on the importance of hand cleansing and the risk of infection, there are no barriers to wound self-management using foam dressings for simple wounds.

Foam dressings are easy to apply and suitable for a wide range of wounds, e.g. a mobile and independent patient using a compression hosiery kit to treat their venous ulcer could apply a foam dressing (Kapp et al, 2010). A relative/carer could use a thin foam dressing, changed infrequently, to manage a skin tear.

### 5 ARE ALL FOAM DRESSINGS THE SAME?

No, foam dressings differ in their fluid-handling ability, conformability, adhesive borders, provision of patient comfort and durability and they may or may not have a silicone-based wound

interface, which aids ease of removal of the dressing (Amione et al, 2005, Woo et al, 2009).

Thorough patient assessment is required before dressing selection. Foam dressings can be used as a primary dressing or secondary dressing over another absorbent dressing if the wound is very heavily exuding.

There are thin foam dressings available for use on lower exuding wounds, which may remain *in situ* for longer periods to allow undisturbed re-epithelialisation of the wound (Stephen-Haynes et al, 2012)

### 6 CAN FOAM DRESSINGS BE USED UNDER COMPRESSION BANDAGING OR HOSIERY?

There are no contraindications for the use of foam dressings under compression bandaging, provided the foam dressing selected is comfortable/acceptable to the patient, manages the leg ulcer exudate and is changed at an appropriate frequency to meet the patient's needs and prevent maceration (Vanscheidt et al, 2007).

However, caution should be exercised when using foam dressings with adhesive borders on leg ulcer patients (Beldon, 2006).

### 7 CAN FOAM DRESSINGS BE USED TO TREAT DIABETIC FOOT ULCERS?

The treatment of diabetic foot ulceration requires a multifactorial approach, including robust assessment of both vascular supply and sensation, assessment and grading of the ulcer, detection of infection/osteomyelitis, and offloading of pressure.

Foam dressings have been shown

to play a part within this whole treatment approach (Lohmann et al, 2004), absorbing exudate and preventing peri-ulcer maceration.

### CONCLUSION

It is vital that the foam dressing selected can perform with regard to exudate management and protect the periwound skin from maceration.

It is also important that the practitioner has realistic expectations as these will influence the patient — failure to change the dressing in a timely manner could lead to over-saturated dressings and a disgruntled patient.

The manufacturer's instructions give pertinent information regarding the appropriate use of the foam dressing and should be used to inform the decision about which foam dressing to select. **WE**

### References

Amione P, Ricci E, Topo F, et al (2005) Comparison of Allevyn adhesive and Biatain adhesive in the management of pressure ulcers. *J Wound Care* 14(8): 365–70

Beldon P (2006) Avoiding allergic contact dermatitis in patients with venous leg ulcers. *Br J Comm Nurs* 11(3): S6–S12

Benbow M (2011) Dressing awkward wounds. *J Comm Nurs* 25(6): 16–22

Brindle TC, Wegelin JA (2009) Prophylactic dressing application to reduce pressure ulcer formation in cardiac surgery patients. *J Wound Ostomy Continence Nurs* 39(2) 133–42

Butcher M, Thompson G (2010) Can the use of dressing materials actually prevent pressure ulcers: presenting the evidence. *Wounds*

UK 6(1):119–25

Kapp S, Miller C, Donohue L (2010) The leg ulcer prevention program: nurse perspectives on a multimedia client education package for people with venous leg ulcers. *Wound Practice Research* 18(2): 91–99

Lohmann M, Thomsem JK, Edmonds ME, et al (2004) Safety and performance of a new non-adhesive foam dressing for the treatment of diabetic foot ulcers. *J Wound Care* 13(3): 118–20

Stephen-Haynes J, Callaghan R, Bethell E, Greenwood M (2012) The assessment and management of skin tears in residential homes. *Brit J Comm Nurs* 20(11): S6-16

Sussman G (2001) Management of the wound environment with dressings and topical agents. In: Sussman C, Bates-Jensen B, editors. *Wound Care: A Collaborative Practice Manual for Health Professionals, 3rd edition*. PA: Lippincott Williams & Wilkins, Philadelphia: 257–70

Thomas S (2010) Laboratory findings on the exudate-handling capabilities of cavity foam and foam-film dressings. *J Wound Care* 19(5): 192–99

Vanscheidt W, Klövekorn F, Vin F, Gauthier J-P, Ukat A (2007) A prospective study on the use of a non-adhesive gelling foam dressing on recalcitrant leg ulcers. *J Wound Care* 16(6): 261–65

Woo KY, Coutts P, Price P, Harding KG, Sibbald GR (2009) A randomised cross-over investigation of pain at dressing change comparing 2 foam dressings. *Adv Skin Wound Care* 22(7): 304–10

*'It is vital that the foam dressing selected can perform with regard to exudate management'*

*Any history of phlebitis, trauma or surgery, which may have damaged the veins, also increases the risk as can prolonged standing, obesity and multiple pregnancies*



**Figure 2.**  
*Ankle flare and venous skin changes.*

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