

Use of Hydroconductive Debridement Dressing Technology for the Management of Complex Wounds

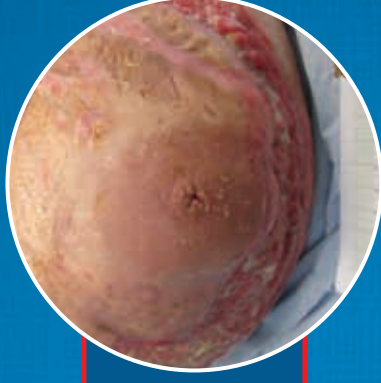
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Introduction:

- Management of complex wounds requires the restoration of balance of a number of factors, such as exudate, protease and bioburden levels, which can contribute to delayed healing
- Excess exudate from chronic wounds can be detrimental to healing, containing cellular debris and enzymes which are corrosive to the wound bed and surrounding skin and higher levels of matrix metalloproteinases (MMPs) which can damage the peri-wound skin
- Prolonged exposure to excess exudate can increase the risk of infection and further damage – achieving the correct moisture balance is key
- Drawtex Hydroconductive Debridement dressings draw large amounts of fluid into and across the dressing while sequestering microbes and harmful proteases, leaving a moist wound bed that is conducive to healing

Method:

- Five patients with complex wounds (3 Surgical, 1 Traumatic, 1 Diabetic Foot Ulcer) were assessed at a specialist wound healing centre
- All wounds were heavily exuding with sloughy tissue to the wound bed and a history of delayed healing with peri-wound skin maceration and/or excoriation
- Drawtex Hydroconductive Debridement dressings were cut as required as either a wick to encourage drainage of a sinus or cavity or to the size of the wound surface
- 2-3 additional layers of the dressing were applied with a suitable secondary dressing to secure
- Dressing changes were performed every 2-3 days as indicated by exudate levels
- Wounds were assessed weekly for up to 4 weeks



Case Study - Day 0

Breast wound following severe infection and cellulitis
Wound Duration: 11 weeks
Wound Bed: 50% Slough, 50% Granulation
Wound Size: 28cm x 7cm
Exudate Levels: High • Odour +++



Case Study - Day 2

Wound Bed: 100% Granulation
Exudate Levels: Moderate
Odour resolved after one dressing change, improving patient's self-esteem



Case Study - Day 24

Wound Bed: 80% Epithelium, 20% Granulation
Exudate Levels: Low
Wound Size: 14.5cm x 2cm
Wound healing well, patient performing own dressing changes, reducing nursing input required

Results:

- Within days of commencing Drawtex Hydroconductive Debridement dressing, exudate levels were being managed effectively and peri-wound skin integrity was restored
- At evaluation end, all five wounds had:
 - Clean, granulating wound beds
 - Reduced in size and/or depth
 - Decreased exudate levels
 - Elimination of odour
- The dressing was reported as comfortable and easy to use

Discussion and Conclusion:

- The hydroconductive debridement action of Drawtex dressings proved highly effective in the management of highly exuding complex wounds
- Exudate was managed sufficiently to restore the wound equilibrium to promote healing and prevent skin breakdown where previous treatments had been unsuccessful
- Trapping of microbes and harmful proteases within Drawtex Hydroconductive Debridement dressings may contribute to successful exudate management as these factors are known to contribute to increased exudate levels
- Debridement of sloughy tissue and formation of a healthy, granulating wound bed is conducive to healing – all wound sizes reduced

References: 1. Chu, B, P. Quinn, D. Sibbald, R. (2010) Peri-wound Skin Protection: A Comparison of New Skin Barrier Products. *Wound Care*, 10(10), 20-24. Available from www.wounds-uk.com Accessed Oct. 2014. 2. Ferguson, M., Sibbald, R., McCullough, S. et al. Analysis of the role of periwound environments: the role of proteases and their inhibitors. *Wound Repair Regen*, 19(9), 716-722-23. Available from www.wounds-uk.com Accessed Oct. 2014. 3. Bantick, J. The effective management of exudate in chronic wounds. *Wounds International*, 2012; 3(4): 14-16. 4. Bullock, J. (2014) Hydroconductive Debridement. *Make Easy Wounds*, UK, 10/12. Available from www.wounds-uk.com Accessed Oct. 2014.