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 woundbed 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 exoriation.
- Drawtex Hydroconductive Debridement dressings were cut as required to 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: 1.45cm 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 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.