Management of Chronic Venous Leg Ulcers Using a Hydroconductive Debridement Dressing

Denise Wilson, Surgical Care Practitioner, University Hospitals of Morecambe Bay NHS Trust, Lancaster. Contact: denise.wilson@mbht.nhs.uk

Introduction:

- Chronic wounds, which include venous leg ulcers (VLU), are known to be a serious and costly global problem[1]
- Prevalence rates suggest there are 70,000 – 190,000 individuals in the UK with VLU at any one time, costing the NHS at least £198M annually[2]
- New treatments able to reduce dressing costs, decrease nursing time and improve treatment outcomes and quality of life for patients are important consideration in decreasing financial burden[1]
- CVLU's are prone to infection which can delay healing and increase exudate levels, odour and pain
- Chronic wounds are also characterised by imbalances at a cellular level, such as increased levels of harmful proteases, which can precipitate a vicious cycle of inflammation, and thus non-healing[4]
- Localised therapies that address these can contribute to improved wound management[4]
- Drawtex Hydroconductive Debridement dressings incorporating patented Levafiber technology employ a hydroconductive action to draw large amounts of exudate, bacteria and proteases into itself while loosening sloughy tissue to leave a healthy, granulating wound bed free from the barriers to healing

Method:

- Three patients with moderate to highly exuding CVLU requiring wound bed preparation to promote healing were evaluated
- Drawtex was applied in layers, cut to the size of the wound, alongside appropriate compression therapy
- Patients were followed for up to 4 weeks or until Drawtex was no longer clinically indicated

68 year old Male Diabetic
Previous Left Amputation
Extensive Right VLU
Copious Exudate

Week 2
Healthy Granulation Tissue
Decreased Size
Exudate Well-Managed

Week 14
Extensive Epithelialisation
Patient reported high satisfaction levels with the treatment and outcome

Results

- All patients showed a reduction in devitalised tissue and increased granulation tissue to the wound bed
- Exudate was well-managed, promoting integrity of peri-ulcer skin and allowing for reduction in frequency of dressing changes
- Odour decreased, which greatly increased patient satisfaction
- Signs of epithelialisation were observed in all ulcers as wound bed conditions were optimised
- Dressing was well-tolerated underneath compression bandaging
- One patient with a particularly chronic VLU exhibiting the classic signs of heavy Pseudomonas infection showed great improvement after two days of using Drawtex dressings - signs of infection were much improved, peri-ulcer skin integrity restored and the patient reported increased comfort

Discussion and Conclusion:

- Devitalised tissue is an ideal environment for the encouragement of bacterial growth[5] which can develop infection and contribute to delayed healing, ongoing inflammation and inability to fully assess the wound[7].
- Drawtex Hydroconductive Debridement dressings can quickly, easily and effectively debride CVLU's, removing devitalised tissue and reducing microbial load without the use of antimicrobial agents which can potentially induce resistance and impair healing. Drawtex is an effective choice of dressing when instigating compression on oedematous legs, as the movement of oedema can result in increased exudate levels which require an absorbent dressing to manage excess fluid and maintain skin integrity
- The use of Drawtex Hydroconductive Debridement dressings resulted in improved treatment outcomes which can impact on the direct costs associated with managing chronic wounds
- Drawtex is a prudent dressing choice for chronic VLU's due to its efficiency at wound bed preparation, ability to reduce microbial load and thus the risk of infection, absorption capability and capacity to remove harmful proteases and kickstart the wound into a healing state

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