

Two case studies to demonstrate the use of an innovative Bioactive Beta-Glucan product for the treatment of stalled wounds: Lynne Hepworth, TVN from South West Yorkshire Partnership Foundation Trust

Introduction: Woulgan Gel (containing Bioactive Beta-Glucan) is a novel topical gel for dry to moderately exuding wounds where healing is stalled. In addition to typical hydrogel properties, Woulgan contains an active beta-glucan as an ancillary medicinal substance, which is able to reactivate stalled healing. This encourages the migration of phagocytic cells (particularly macrophages) to the wound bed and thereby promotes contraction of the wound margins and healing (granulation and epithelialisation). Two cases presenting remarkable healing results are outlined.

Method: Two community based patients who had leg ulcers where healing had stalled were selected. Selection criteria included; the wound should be free of infection and the patient should not be taking steroids. Both patients received compression therapy and neither patient experienced pain or adverse event. A thin layer of Woulgan was applied at each visit.

Case 1: 76 year old, self-sufficient single lady living alone in sheltered housing. Childhood polio left her with residual disability to shoulder, arm and hand. Mrs X has angina and is prescribed statins and aspirin. In October 2015, she had a fall and sustained a fracture of the left tibia and fibula. Following surgery the wound became infected and was treated with a silver, fibrous absorbent dressing, followed by a disposable NPWT device and oral antibiotics. Later, Mrs X was discharged home with disposable NPWT in situ. Following Doppler assessment compression was applied. The wound initially improved but at 4.5 months post-surgery, the wound stalled, apparently stuck in a low-grade, inflammatory phase. Woulgan Gel was then applied twice during week 1 under compression. Following 2 applications of Woulgan Gel, the wound had improved. The wound was then dressed weekly and had fully healed by week 6.



Discussion: Chronic wounds are a huge burden on the NHS purse and present a problem for patients, including pain, low self esteem and often, social isolation. Both cases presented in this trial, had become housebound because of their injuries, and were dependant on the district nurses. In case study 1 - during the trial 7 tubes of Woulgan was used, total cost, £140, equal to the cost of one week using negative pressure wound therapy (NPWT), as previously used. In case study 2 - 8 tubes of Woulgan were used at a total cost £160. This patient had already had 9 weeks of treatment twice weekly dressings prior to the trial.

Conclusion: Woulgan Gel has proved to be an effective, bioactive dressing in two wounds where healing was stalled. Woulgan Gel debrides and accelerates healing, by modulating macrophage function and thereby promoting wound contraction and healing. If the wound contact dressing had remained unchanged in both cases, the wounds would not have healed in the quick timescale and may have remained in an inflammatory phase for weeks.

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