The use of Woulgan to heal a chronic leg ulceration

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Introduction

Tissue Viability Nurses encounter numerous chronic ulcerations due to varying contributing factors. The most frustrating are the ulcerations which become chronic because active treatment is not suitable for the patient. Leg ulceration can have a devastating effect on a patient's life as they fear leakage and odour in public, resulting in social withdrawal[1]. It is estimated that chronic leg ulceration has a prevalence of 0.1% and 0.3% in the UK[2]. Primary health care professionals are required to diagnose and manage venous leg ulceration appropriately[3]. This case study shows the positive effect Woulgan had on one particular patient with a chronic lower leg ulceration.

Method

Following consultation with the Neighbourhood care team the patient was selected, their wound being considered to correspond with the inclusion criteria which included a wound size parameter, diabetic stability, wound chronicity and absence of steroidal therapies. The purpose of the evaluation was explained to the patient and informed, written consent was obtained. The patient was aware that, either they or, nursing staff could stop the evaluation at any time if necessary.

The evaluation period lasted for twelve weeks in total. Initially at the first contact (week 0) all information was collated to include age, gender, wound demographics, pain experience, previous dressing selection and wound photography. Dressing changes were scheduled for twice per week. The patient was reassessed once per week during weeks 1-4, subsequent dressings were performed by the neighbourhood care team. Subsequent assessments of the wound, including photographs and evaluation of the dressing were done at week 8 and week 12 when the evaluation ended.

A gentleman of 80 years of age was very keen to be enrolled onto the Woulgan evaluation, as he said "I am fed up with this ulcer, I have lived with it for years, the nurses have tried everything". Previous dressing regimes had included all relevant usage of dressings within the Trust's formulary. The patient had also previously been under the care of a vascular surgeon. Due to cardiac comorbidities surgical intervention was not possible and conservative treatment provided.

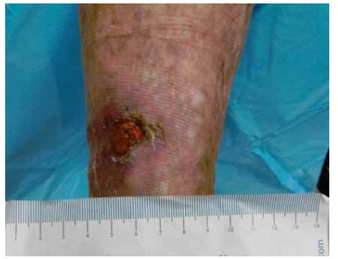
Results

At week 0 the ulceration to the lower right leg had been *in situ* unchanged for seven months, over the years this had been a reoccurring ulceration. The previous dressing was a hydrofibre and an adhesive foam dressing. The patient said he experienced a constant pain score of 4/10, soreness in nature. The ulceration was superficial, 1.3cm width x 1cm length, 95% dark red granulation tissue with a 5% thin coverage of yellow slough. Surrounding skin was dry with some dry plaques which were removed with a monofilament debridement pad and the leg was cleansed with an emollient. The care plan was formulated to ensure subsequent dressings would be uniform. Woulgan was applied with a foam non adhesive pad, stockinette, compression bandages toe to knee. At each visit the wound was cleansed prior to reapplication of Woulgan.

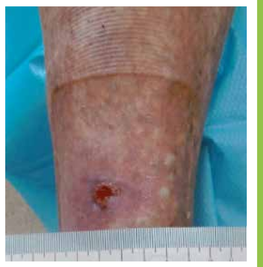
At week 1 the patient said he was no longer in pain and found the dressing very comfortable. The previous dressing was removed with ease, exudate had increased slightly and was blood stained in nature, there was an indication of maceration to the wound edges, to remedy this a barrier preparation was applied to the peri wound skin. The application of Woulgan was not taken to the wound edges in an attempt to prevent overflow when the foam dressing was applied. No additional changes in the wound bed were noticed. The patient was very keen to continue with Woulgan due to pain relief.

At weeks 2-3 again there was no visible improvement to the wound bed. The previous maceration to the peri wound skin had improved on week 2, but returned on week 3, this was possibly due to the area not having an application of a barrier preparation at the previous dressing change. The patient was keen to continue as he said "the wound feels better and I have no pain".

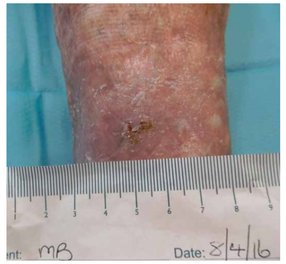
At week 4 the ulcer had reduced in size minimally at 1.2cm width x 1cm length. Epithelialisation to the wound margin was evident. There was a minimal amount of clear exudate and the peri wound skin was intact, with no signs of maceration. Again the patient said he was pain free and very happy with the positive change to the ulcers appearance.



Week 0 (initial assessment)



Week 4



Week 8 (healed)

Discussion

This chronic ulceration had previously not responded to any other conservative treatments offered. The patient was obviously becoming frustrated with the ulceration and how this impacted upon his life, especially the constant discomfort which impinged upon his hobby of gardening. Woulgan was used as the patient was eager to try any new product which may result in some positive change to the ulcer.

During the first few weeks of using Woulgan, there was no noticeable improvement to the wound bed. I was however pleased that it immediately had a positive effect upon the patients pain experience. There was a detriment to the peri wound skin due to an increase in moisture, as there had been no increase in exudate I assumed this was due to the Woulgan contacting the peri wound skin. This was easily remedied by altering the application of Woulgan to the wound bed and applying a barrier preparation.

At week 8 I was amazed and so happy for the patient as the ulceration had healed. This was something he did not think was ever going to happen. At six months post healing the ulcer remains healed and a stocking liner of 10mmHg is been worn prophylactically.

To conclude I have been amazed at the healing rate of Woulgan, particularly from week 4 onwards. All other conservative dressings had been exhausted and the patient thought he would have to learn to live with his ulceration. Due to the conservative nature of the ulcer I would in the future consider the use of Woulgan for similar circumstances, being chronic ulcerations which are unsuitable for active surgical treatment. As a nurse it is extremely rewarding to assist in the total, continual healing of chronic, problematic ulcerations and how you know the positive result will enrich the life of the patient .... and their families.

References

(1) Ebbeskog. B and Elkman. S (2008) Elderly person's experiences of living with venous leg ulcers in a dialectal relationship between freedom and imprisonment. Scandinavian Journal of Caring Services, 15(3): 235-243.

(2) Scottish Intercollegiate Guidelines Network (2010) Management of chronic venous leg ulcers.

(3) National Institute for health and care excellence (Feb 2016) The management of venous leg ulcers.

Disclosure: The author received an honorarium from Biotec BetaGlucans