

# A new solution to an old problem – an innovative active debridement system



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Picture 1



Picture 2



Picture 3

## Introduction

This is the case study of Mrs H an 81 year old with a history of a venous leg ulcer and varicose eczema since July 2007 possibly originating from a bite. She presented to the surgery in May 2008 (*Picture 1*).

Mrs H had been widowed at the beginning of her leg ulcer management and, at that time, had no close family. She was a non-smoker and drank only a minimum amount of alcohol, lived alone and was initially almost housebound, but became more active as time progressed. Mrs H was understandingly anxious at times regarding wound healing and dealing with leaky bandaging, although she was generally willingly to follow advice and guidance given to her by the nurses. Her visits to the surgery became her social life, but difficulty in getting to the surgery sometimes restricted the frequency of the dressing changes. More recently a younger sister came to live with her, which helped psychologically and with transport arrangements.

Between the years of 2008 and 2011 there was a cycle of visits to various medical specialists, wound deterioration, infection, severe hyperkeratosis and varicose eczema. Despite the support of the Tissue Viability Nurse, a full holistic leg ulcer assessment, compression therapy and appropriate treatment, the wound continued to deteriorate, improve and then deteriorate again (*Picture 2*).

A period of hospitalisation was instigated for bed rest and elevation and the treatment of anaemia, but the condition deteriorated once again. In 2009 the wound almost healed and preparations were made to continue management in compression hosiery. Unfortunately the wound deteriorated once again.

The costs associated with the management of this particular wound and skin conditions were considerable. This included 3-4 episodes of nurse time per week over the 3-4 year period, antibiotics on a regular basis, hospitalisation, wound dressings and bandages and various creams such as steroids and emollients.

## Method

Mrs H was selected to evaluate an active debridement system\*. The aims of treatment were;

- to remove slough from the wound
- to remove hyperkeratotic skin
- to instigate healing in this static wound

The debridement pad was used at each clinic visit on five occasions over a 2 week period. Debridement time varied between 2 and 10 minutes with a positive outcome noticed immediately on all 5 occasions. Pain scores using the Visual Analogue Scale (VAS) were 0 during treatment and 0 after treatment on all 5 occasions.

## Results

The wounds and varicose eczema healed following the 2 weeks of treatment (*Picture 3*) and Mrs H was then managed in compression hosiery. The debridement pad was used twice to prevent the build-up of hyperkeratosis.

## Discussion

Although this is the report of one patient, it represents the potential benefits for many other patients. The potential cost savings are very clear to see and the improvement in the quality of life for Mrs H is immeasurable.

## Conclusion

The active debridement system made the difference in healing the wound and skin condition for Mrs H. It was painless for the patient, easy and quick to use and was suitable for use by any Practice Nurse or District Nurse in a clinic setting. I would also like to acknowledge the input of my colleagues in the surgery and the TVNs and DNs involved in Mrs H's care.

\* Debrisoft® – Activa Healthcare