

Introduction

Leg ulcer management is well documented and researched. Patients are often under long term care of the vascular team, have complex and long histories and are generally reviewed on a six monthly basis in out-patients. The treatment regime often remains static, patients frequently cancel appointments due to the lack of progress. The author receives referrals from the community sector to help in such cases. Many of these patients feel despondent and that their quality of life is limited. Choices of dressings within the community sector are vast but as registered practitioners we are obliged to provide the best evidence based care to such patients. Following a holistic assessment of patients with leg ulceration with an aim to meet their individual needs the author will present two case studies of patients with long-standing chronic venous leg ulceration where Polymem QuadraFoam™ was used to meet the needs identified.

Case Study 1

- Background and Treatment History**
- 82 year old gentleman, chronic bi-lateral leg ulcers. Doppler results and history is indicative of venous disease. His legs are very painful.
  - This gentleman has been under the care of the Vascular Team for many years and under the care of the District Nurses for even longer: records show dates of approximately 18 years; prior to this, seen by the Practice nurse. Recently seen by the CNS Tissue Viability.
  - Ulcers colonised with MRSA. Several eradication attempts with antibiotics were unsuccessful, the patient has declined further treatment.
  - This gentleman has been in a four layer compression system for the past eleven years.
  - There have been periods in the past when there have been signs of improvement but the condition then plateaus and deteriorates.
  - The District Nurses were keen to reduce the number of visits per week to see this gentleman, however the amount of exudate would deem this unfeasible. In the past when time between visits was longer pseudomonas infections would often occur.

**Holistic assessment**  
Holistic assessment was performed on the Author’s visit: it was apparent this gentleman was low in mood. His main concern was the smell. He also felt that the compression bandaging was making no difference. The legs showed signs of erythema and swelling. There was devitalised tissue present which was also likely to be contributing to the malodour as well as delaying any healing. The author discussed the option of using PolyMem QuadraFoam™ dressings, to which the patient gave consent. Photographs were taken prior to treatment (Fig 1) Right leg. (Fig2) Left leg.

**Observations and outcomes of treatment**  
Initially exudates levels increased dramatically, daily dressing changes were implemented. Compression bandaging was stopped at the patients request. The status of each leg was reviewed at each dressing change. Exudate levels decreased over two weeks and dressing changes reduced to every third day. Five weeks post-application of PolyMem QuadraFoam™ , there were dramatic improvements (Fig 3). The patient stated that his pain had now gone and that there was now no smell, which enhanced his quality of life.

Method

The author provided holistic assessments for the two patients to ensure PolyMem QuadraFoam™ would benefit their individual needs. Once applied, the dressing was monitored and evaluated to assess healing progress and other outcomes.  
As with all dressings, the composition of the dressing and its mode of action along with its contraindications were considered, this was supported with its clinical evidence.

Discussion

This presentation will present two clinical case studies of two patients with chronic venous leg ulceration. PolyMem QuadraFoam™ is composed of a hydrophilic polyurethane (PU) membrane matrix with a semi permeable continuous thin film backing, optimised for oxygen and moisture vapour permeability and acts as a barrier to liquids.  
Together with its other ingredients (Glycerol, F68-Surfactant and Starch co-polymer) contained within the PU matrix, PolyMem dressings are designed to cleanse, fill, absorb and moisten the wound throughout the healing continuum; aiding debridement and promoting granulation and epithelialisation.



Case Study 2

- Background and Treatment History**
- 70 year old lady with bi-lateral leg ulcers, initially referred to CNS Tissue Viability in 2005.
  - Doppler performed and compression bandaging implemented, several treatments tried with no improvement, advised by CNS Tissue Viability to be referred to Dermatology.
  - Seen by Dermatology Consultant: possible mixed aetiology, compression stopped, Duplex scan and vascular referral requested. Duplex scan confirmed no arterial disease, compression bandaging re- implemented.
  - Has continued to been seen under the vascular consultant since this time with no improvement.

**Holistic Assessment**  
March 2008: referred back to Tissue Viability, seen by the author. The patient’s main concerns were the smell, pain and the regular cost of getting to the surgery by Taxi. Requested blood tests to further investigate the nature of the wounds, which all returned with normal results. Option of using Polymem QuadraFoam was discussed with the patient, who gave her consent to proceed. Initial wound photographs were taken (Figure 4).  
**Observations and Outcomes of Treatment**  
Polymem QuadraFoam™ commenced under compression. Exudates levels increased as we have seen in other patients when PolyMem is initially applied. Dressings were therefore checked on alternate days for the first two weeks. This then reduced to twice-weekly, then weekly as the exudate levels dropped. As shown in the photograph three months post application (Figure 5) there is a huge improvement in the integrity of the skin. This lady is now healed and in compression hosiery.



Results

**Cleansing** - PolyMem QuadraFoam™ has the ability to continuously cleanse wounds when worn. This in itself brings an added advantage in reducing costs and nursing time, as well as enhancing patient comfort; manual wound cleansing can be painful for patients. Devitalised tissue was present in both patients’ wounds, and that this is likely to have contributed to infection, malodour and slow healing seen in these patients. Commencement of PolyMem dressings certainly helped debride these areas, or at least made it easier for the author to remove debris. Both patients felt that the reduction in odour, which diminished very quickly during the new treatment, enhanced their quality of life.  
**Healing Progress** - Following implementation of PolyMem QuadraFoam™ an improvement to both patients was seen. Initially both patients experienced an increase in exudate levels and required an appropriate frequency of dressing changes; however these levels decreased over a two–three week period and nursing staff were able to reduce the dressing changes accordingly. There was a reduction of swelling in both patients and erythema was reduced in Patient One’s wounds. It was interesting to note so much progress in wounds that have been present for years.

Conclusion

As practitioners it is our duty to provide evidence based care. By using an evaluation process, we are able to provide dressing choices that demonstrate clinical effectiveness. Following holistic assessment of patients, we can then select products to meet and address the specific needs of the individual, ultimately enhancing the quality of the life for each individual patient. In the two cases presented, PolyMem dressings certainly helped improve the quality of life for these patients.  
Pain reported by both patients was reduced on commencement of the PolyMem dressings: both patients found the dressings comfortable to wear. Additionally Patient One said they felt the dressing was cool and took away the “burning sensation”, and Patient Two said it was soothing and “better than a massage!”