

Polymeric Membrane Dressings* Contributes to Improved Quality of Life of a Patient with Severe Recessive Dystrophic Epidermolysis Bullosa (RDEB)

“Overall polymeric membrane dressings have made a great impact on my back in day to day life”.

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INTRODUCTION

It is widely acknowledged that those affected with the severe forms of EB have a tendency to develop widespread chronic wounds that are difficult or fail to heal. Those areas of skin affected by repeated breakdown remain very fragile even after healing occurs.

Current treatment for all types of EB is based on symptom management with emphasis on skin and wound therapies, pain relief together with nutritional and psychological support.

The aim of wound management in this group of patients is to protect the skin from further damage while providing an optimal healing environment for those areas that have been damaged. Wound management is complex with a confusing number of dressings available. Therefore suitable dressing choice is paramount. Dressings used should be limited to those that are non-adherent to the wound bed and the fragile peri-wound skin.

‘Sally’ is 20 years old and has Severe RDEB. She has suffered repeated breakdown of the skin on her back for more than 8 years. These wounds stretched from shoulders to hips. She also suffered with recurrent wound infections that required treatment with oral antibiotics. Sally has tried many different dressings with varying degrees of success and acceptance, these include soft silicone dressings, various foams as well as honey products. Prior to daily dressing change Sally bathes to allow easier removal of dressings.

Aim

To evaluate the use of Polymeric Membrane Dressings* in the management of chronic wounds in RDEB.

Factors considered were:

- Healing
- Pain
- Itch
- Ease of application
- Ease of removal

METHOD

Polymeric membrane dressings are non adherent. They have a polyurethane matrix, with a semi-permeable thin film backing. These dressings contain components which draw and concentrate healing substances from the body into the wound bed to promote rapid healing while facilitating autolytic debridement. The continuous release of the wound cleanser/surfactant eliminates the need for manual wound bed cleansing during dressing changes. The surfactant, glycerol and starch-copolymer work synergistically promoting wound cleansing and healing. Polymeric membrane dressings have a documented effect on reducing tissue inflammation and pain.

RESULTS

In an attempt to improve wound healing Sally’s dressing were changed to Polymeric membrane dressings. It was noted that in the first two weeks there was a substantial increase of exudates with leaking around the dressings onto the clothes. Sally also experienced an odour that she found quite offensive, however, since there was a noted improvement of the wound, reduced pain, decreased crusting and itch, the dressing was continued. The wound quickly showed evidence of granulation and epithelialisation, decreasing in size from 12 cm x 18 cm to 10 cm x 15 cm in one month. The exudates and odour gradually decreased. This improvement continued for several more months until the 8th month when healing slowed.

DISCUSSION

Polymeric membrane dressings have had a huge impact on Sally’s quality of life. Her wounds continue to decrease in size and she no longer feels pain when bathing. Prior to changing to Polymeric membrane dressings Sally experienced repeated wound infections requiring 3-4 courses of oral antibiotics a year, since using Polymeric membrane dressings she has required no antibiotic therapy for infected wounds on her back. Dressing changes are quicker and easier with a reduction in the quantity of dressings used.



September 2008

- Extensive difficult to heal wounds for 8 years+
- No or little improvement
- New areas continually breaking down
- Uncomfortable dry crusted areas
- Regular wound infections
- Intense itch
- Painful removal of dressings

Improvement was seen within a week, wound cleaner.



1 month later (October 2008)

- Dramatic improvement of wound & skin
- Reduced itch
- Reduced pain
- Comfortable dressing
- Easy dressings removal
- Difficult to secure dressing
- Increased exudates – leakage onto clothes
- Increased malodour

Securing polymeric membrane dressing with a soft silicone mesh to reduce slippage.



7 months later (April 2009)

- Continued improvement – islands of wounds within healed skin
- Healing slowed
- Improved comfort
- No pain
- Reduced itch
- Dressing change easier & quicker

Slower healing but continued improvement August 2010.



2 years later (December 2010)

- Wounds smaller
- Faster healing
- Healthier & stronger peri-wound skin
- No pain
- Minimal itch
- Reduction in quantity of dressings used
- Improved quality of life

Polymeric membrane dressings covering Sally's back.



“Before using Polymeric membrane dressings I had a wound on my back which covered shoulder to hip level. Once I started using the Polymeric membrane dressings the improvements started straight away. Admittedly I did have my doubts as the odour and exudate coming out from the dressing was unbearable, but once this reduced, all the changes to the wound were very positive. 2 years on and I am still using them. My wound on my back is now described as small islands rather than one big island and there is smooth new skin. It is much quicker to apply and a lot more comfortable, it is quicker to take off while I’m in a bath. I can now go back to swimming again which I love, before it really hurt to go in a pool. I do not have pain on my back at all, in or out of the water. It does still itch but usually areas where the PolyMem has healed the wound. I also feel much more confident going out as I know the wound is protected; therefore it will not leak exudate or smell.

Overall Polymeric membrane dressings have made a great impact on my back in day to day life”.

REFERENCE

- Practical Management of Patients with Epidermolysis Bullosa, British Journal of Nursing 2008. Foreword by Elizabeth Pillay

PRACTICAL INFORMATION REGARDING POLYMEM®

Initial increase of exudate is an expected part of PolyMem’s® mode of action. The manufacturer recommends increased frequency of dressing changes and/or the use of PolyMem® MAX (thicker, more absorbent than the regular PolyMem®) during the initial period of use.

PolyMem® and PolyMem® MAX Wound Dressings. Manufactured by Ferris Mfg Corp, Burr Ridge, IL 60527 USA. This case study was unsponsored. Ferris Mfg. Corp. contributed to this poster design and presentation.