**The Use Of Polymeric Membrane Silver Dressings**

*In Burns - a Case Series*

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**INTRODUCTION**

Burn pain is described as excruciating and by some authors as “a living hell” and certainly most authors would agree that burn pain is the one of the most severe forms of all pain. Burn pain is unique in nature and initially patients may feel little or no pain for the first several hours due to the initial shock reaction. However, once pain is felt, there is a never ending round of procedures and dressings which all contribute to the pain experience. Traditionally in burn care, dressings, largely due to size have centered on petrolatum impregnated gauze type dressings. Unfortunately these lead to pain, trauma on removal and the shedding of fibres into the wound. This in turn leads to increased pain at dressing changes, which leads to anxiety about forthcoming dressings and consequently an increased pain experience.

Therefore, clinicians are often seeking the ‘ideal dressing’ that promotes healing, but also reduces pain and nursing time, whilst preventing infection, a problem in burns.

**AIM**

This was a proof of concept evaluation of the potential use of polymeric membrane silver dressings* in a range of burns to see whether further evaluation was required.

**METHOD**

3 patients with burns wounds were treated with polymeric membrane silver dressings. 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 by loosening the bonds between the slough and the wound bed. The surfactant, glycerol and starch copolymer work synergistically promoting wound cleansing and healing. The nanocrystalline silver particles are embedded into the foam matrix and are not released onto the wound surface.

**RESULTS**

All patients found the dressing comfortable to wear, easy to apply and remove and preferable to other products they had tried. Staff found the dressing easy to use and effective in promoting wound healing in these very painful wounds. The only negative comments were that staff would have liked a more *“tacky dressing as occasionally it was a little difficult to apply.”*  

**DISCUSSION**

Polymeric membrane silver dressings offer a good clinical advantage when used in burns and burn-related wounds. Patients had an overall reduction in pain when using these dressings and given that these are some of the most painful injuries, this could have a positive effect on wound healing and overall return to normal function.

This could be a significant finding in terms of managing these wounds as previously pain was an accepted consequence of a burn injury and often patients learned to expect pain at dressing changes. This is supported by Watkins et al* who suggest anxiety is anticipatory, in that the stressor is no longer the burn, but the severe and repetitive pain experienced for which inadequate analgesia has been provided. They argue that once the patient has learned to associate burn treatment with pain, even increased analgesia will be inadequate. This dressing potentially gives practitioners the opportunity to prevent patients from “learning about pain” and therefore hopefully anticipatory pain will be prevented.

**CONCLUSION**

These case studies have identified that polymeric membrane silver dressings have the potential to be a useful adjunct in the management of this wound type. Further formal evaluations have been carried out on both acute burn wounds as well as chronic non-healing burn related wounds. The positive outcome from these evaluations has resulted in these polymeric membrane silver dressings being a part of the Burn Centres formulary.

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*PolyMem® Silver Wound dressing and PolyMem® WIC Cavity Dressing

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**References**


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.