Improving Outcomes of 2nd Degree Facial Burns Using Polymeric Membrane Dressing* Masks

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**INTRODUCTION**

In our practice we have used polymeric membrane dressing* (PMDs) on donor sites for more than 6 years and in more than 1,200 patients with good clinical results measured in terms of pain relief, rapid healing and good scarring in the long term follow up. In facial burns, early intervention is critical to reduce continuing burn injury and initiate the wound healing process. The formation of edema and inflammation develops quickly and is an ongoing source of pain for the burn patient. Traditionally in our practice, wet dressings activated by Ringer Solution are applied to the burn site for the first 24 hours followed by an ointment of chloramphenicol with 0.1% steroid which is applied on a daily basis.

**RATIONALE**

Multifunctional, drug-free, PMDs help to reduce the spread of inflammation, swelling and pain into surrounding areas of undamaged tissue. This helps to prevent further continuing burn injury and allows the body to initiate the healing process in the primary areas of damaged tissue. The dressings inhibit the nociceptor activity at the injury site.

**METHODS**

Applying our past experience, five facial burns, of both superficial and deep second degree, were treated with masks made, on site, from PMDs. These dressings have been shown to manage excess fluid and reduce edema while cleansing the wound and decreasing or eliminating wound pain. The dressings were applied within one hour after the burn injury occurred and after initial wound cleansing. The dressing masks were held in place with stretch gauze and changed every 2 to 3 days unless overload of secretion was seen.

**RESULTS**

Compared to our common practice, the PMDs provided an improved healing outcome; decreased edema and inflammation; and reduced wound pain. It is our impression that a rapid application of the dressings reduced the extent and severity of this type of burn. In 6 days, the burns were exhibiting excellent and rapid healing. Compared to the traditional approach, the patients and nursing staff found the dressings were very easy to use and decreased the number of dressing changes required while improving the patients’ quality of life. The dressings seem to provide a better cosmetic outcome and patient satisfaction.

**CONCLUSION**

Polymeric membrane dressings are effective for wound care management of superficial and second degree facial burns. The dressings quickly reduced inflammation, edema and pain while providing an optimal healing environment.

**BIBLIOGRAPHY**


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*PolyMem* 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.