THE USE OF ACTIVE *LEPTOSPERMUM* HONEY IN THE NON-OPERATIVE MANAGEMENT OF A DEEP PARTIAL THICKNESS FLAME BURN TO THE FACE

PURPOSE

This presentation is to illustrate the effectiveness of Active *Leptospermum* Honey^{*} (ALH) to demonstrate autolytic debridement and optimal wound progression on a critical, deep partial thickness facial burn in a young female where surgery was not the preferred intervention.

OBJECTIVE

To establish and demonstrate the safe and timely debridement showing positive wound progress the use of ALH affords the burn patient and burn care team.

METHODS

The patient was a 21 year old female who suffered burns to 50% of her total body surface including her face, hands, and lower extremities on 10-16-13 as a result of a house explosion. Upon assessment of her injuries, the patient was sedated and a decision was made to excise and graft her hands and lower extremities. The burns on her face were believed to be a deep second degree or indeterminate status burn and initial treatment was mafenide acetate** and silver sulfadiazine^{***}. On 10-18-13, the debridement of the eschar was unsatisfactory and ALH was initiated. ALH was suffused onto Petrolatum Gauze Non-Adhering Dressing gauze with bismuth tribromophenate^{****}, then applied to cover the entire face, then gauze wrap, burn net, and changed daily. During the next 7 days, the eschar debrided in various facial areas with granulation noted. No surgery was required. Continued granulation noted by 11-4 with the cheek and chin areas healing faster than the forehead so the dressing on the forehead was changed to *Leptospermum* Honey Hydrogel Colloidal Sheet (LH HCS)***** as to add a more structured dressing. On 12-16-13 the patient's face is nearly healed 2 months after injury and she was discharged into an acute rehabilitation facility.

RESULTS

The patient's facial burn, with the use of ALH treatment, demonstrated excellent autolytic debridement, healing progression and an optimal post healing appearance. Using one product from the acute bur phase through to healing enabled a simple plan of care for the staff. Most importantly, the patient was able to avoid potentially multiple surgieries and an uncertain cosmetic outcome.

CONCLUSION

The result of this case was encouraging and suggests that incorporating ALH into a burn care regimen for deep partial thickness burns may be very beneficial.

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Day 1	Accident Occurred 21 year old female suffered burns to her in her home.	r body and face as th	
Day 2	Decision was made to switch to a daily treatment of ALH Gel of the current topical intervention of mafenide acetate and silve the facial eschar.		
Day 5	<image/>	 First images taken present. This is de Images were take redressing with Al ALH Gel; full fac Impregnated Non-Adhering I tribromophenat 	
		Significant autolyt	

Day 12



and liquefy the fac in progress with granulation tissue.

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ne result of an gas explosion due to the lack of progress of er sulfadiazine to breakdown	Day 19	<image/>
n showing 100% facial eschar day 3 of the ALH treatment. en post cleansing and prior to ALH Gel ace and ear coverage onto Petrolatum Gauze Dressing gauze with bismuth ate	Day 58	<image/>
tic debridement to soften cial eschar. Wound healing appropriate formation of	8.5 Months Post Initial Injury (6-27-14)	



Chin, cheeks and nose have re-epithelialized and closed. Forehead has healthy appearing granulation tissue with re-epithelialization beginning to appear at the edges.

Protocol modified to LH HCS dressing for the forehead area



Face nearly healed 2 months after initiating ALH treatment. No surgical intervention was performed. Images show epithelium working to close from outside in.



The patient demonstrated excellent healing outcomes and post healing appearance. As of 6-27-14, the patient is under a plan of care to reduce the isolated areas of redness and for continual improvement in cosmetic appearance. We hope to update this case in the future.

^{*}MEDIHONEY[®] Active *Leptospermum* Honey Dressings, Derma Sciences Inc., Princeton NJ ** Sulfamylon[®], UDL Laboratories, Inc. Rockford, IL

^{***} Silvadene, Monarch Pharmaceuticals, Inc. Bristol, TN

^{****}Xeroform[®]. Derma Sciences Inc., Princeton NJ

^{*****}MEDIHONEY® Leptospermum Honey Hydrogel Colloidal Sheet Dressings, Derma Sciences Inc., Princeton NJ