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ABSTRACT

A 37 year old black male was involved in a motorcycle accident on 5/8/14 resulting in extensive "road rash" involving his right arm, knee and lower leg. He was initially seen in the local emergency department where more serious injuries were ruled out. The staff attempted to remove gravel and debris. They provided orders for Vaseline gauze, triple antibiotic ointment, and Xeroform gauze. Family was compliant with dressing changes, but saw little improvement over the first week. Pain remained an issue as well as a concern that these open wounds, although not severe, would interfere with their planned vacation, the following month.

After no visible healing for almost two weeks, concern mounted that these non-healing wounds would postpone their vacation. Based on inservice education introducing the Southwest Technologies, Inc. (SWT) product line, interest was sparked and the protocol was changed. The new protocol was simple, easy to comply with and painfree. To remove the remaining debris, surface bacteria and nonviable tissue, Stimulen® Lotion was generously applied to the open area on the arm. Stimulen® Gel was then added to optimally manage the inflammatory cycle and trigger rapid healing. The entire surface was covered with Elasto-GelTM which not only provided an antimicrobial secondary dressing and protection against friction and elements, but also provided immediate pain relief. The dressing was so comfortable and secure that the patient was able to return to work. Improvement was visible with the first dressing change and continued with all subsequent dressing changes.

Tissue quality, epithelial resurfacing and color returned for *complete healing in just 20 days after 8 days of non-healing with traditional dressings*. The patient left for his vacation on 6/6/14 with his arm completely healed. The remarkable value of these dressings is evident when the healing outcomes are compared. The arm treated with SWT products healed quickly and completely. The other wounds on the knee and right lower leg were not treated with these products because the patient felt that they were superficial and should heal quickly. These areas lagged behind in healing and months after have developed raised scars and a loss of pigmentation. The patient and his wife were ecstatic that there was NO scarring and NO keloids with the wound treated with SWT products. *(see back for information on scar reduction)*



Changed Protocol 1746 Levee Road, North Kansas City, MO. 64116 applie ph:(800) 247-9951 ph:(816) 221-2442 fax:(816) 221-3995 applies www.elastogel.com *Elasto-Gel Stimulen A Gold Dust Nectacare Toggid Crutch Mate* Rev. B 11-14

Optimal Healing for Reduced Scarring

Although wound care patients are focused on rapid healing, quality healing is a real concern. With serious injuries, the final healed wound may be an unwelcome memory. Ideal healing will result in optimal repair and minimal scarring. Scarring is dependent on the level of tissue loss. When the epidermis and superficial dermis are lost, wounds heal by regeneration. Epithelial, endothelial and connective tissue can be reproduced allowing regeneration to take place. Deeper wounds heal by scar formation- granulation tissue fills the defect and is then re-epithelialized. Healing occurs across a spectrum from ideal (scarless) healing, scar formation, and abnormal healing with the formation of hypertrophic and keloid scars. Hypertrophic and keloid scars are excessive scarring with raised, erythematous, and pruritic tissue.

Scar reduction begins with optimal healing. By controlling the variables that lead to delayed healing such as infection, an exaggerated inflammatory state, and moisture imbalance, wounds will heal with minimal fibrosis or hypertrophic scarring. Identified risk factors for excess scar formation include darkly pigmented skin, age less than 30 years of age, familial history, and wound location. Skin that is subjected to tension or stretching is also more likely to scar.

In addition to optimal healing, the use of special silicones and elastomers, gentle massage and light pressure may be helpful in reducing a hypertrophic scar. For the most severe scars, surgery, lasers, injections and radiation may be needed. An alternative is glycerin-based sheet dressings. *Several advantages set this option apart from silicone dressings*. It can be placed directly on open wounds providing early intervention, is dramatically less expensive and is less likely to cause skin irritation. Elasto-GelTM is a unique glycerin sheet dressing that offers all of the above benefits PLUS it is bacterio-static.

This patient was at a significant risk of hypertrophic or keloid scarring. The wounds on the upper arm were the most serious. They were treated with Stimulen® and Elasto-GelTM. They not only healed faster than the less severe lower leg wounds, but healed with normal pigmentation and no scarring. Because the patient did not see the lower leg wounds as complex, he opted to use conventional dressings. The result was that these wounds lagged weeks behind in healing and developed raised scars and abnormal pigmentation.

The synergy between the Southwest Technologies Inc. products is key to ideal wound closure even in the most challenging patients. Proper use of these products result in timely wound closure, decreased pain and itching, improved quality of life, improved cosmetic appearance, and improved tensile strength. This patient and so many others would contend that these dressings are worth their weight in gold, when in reality, they are among the most cost-effective wound care products on the market today.

¹ Evans RB, McAuliffe JA. Wound classification and management. In Hunter JM, Macklin EJ, Callahan AD, (Eds.). Rehabilitation of the hand: Surgery and therapy. (4th Ed.). St Louis, MO; Mosby-year book. 1995; 217-235.

- ² Rabhan SR, Garner WI: Fibroproliferative scars, Clin Plast Surg 30:77, 2003
- ³ Baum TM, Busuito MJ. Use of a glycerin-based gel sheeting in scar management. Adv wound care. 11:40-43, 1998



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Elasto-GelTM yield
BEST resultsWithout Stimulen®
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results were less than
ideal



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