



MANAGING COMPLEX WOUNDS WITH COLLAGEN

Over the past five years, there has been a change in the types of wounds that are being seen in wound care clinics. Although the most common etiologies remain those pressure injuries, venous ulcers, arterial ulcers and neuropathic wounds, a new wound etiology has emerged. Secondary to the growing epidemic of intravenous and subcutaneous use of drugs such as cocaine and heroin, wounds are developing. These wounds are complex and require large and devastating debridement. Even after debridement, the clean wound remains challenging because of noncompliance, hygiene issues and the ongoing use of drugs. Another complication facing healthcare is payer source. The vast

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vigorate gel



majority of these patients are either uninsured, underinsured or self-pay. This required tremendous creativity on the part of the wound care team. A common complication in this patient population is Hepatitis C; the unintended result of numerous injections of illicit materials. This creates a problem with severe hypo-proteinemia which is not correctable because of a protein synthesis defect in the liver. Therefore, not only is there the challenge of healing a large, complex wound in a non-compliant patient, but there is the added complication of permanent malnutrition.

collagen powder



When we look at this challenge from the perspective of traditional wound healing, this is a patient population that is presenting with a loss of native collagen. Collagen has been shown to have a critical role in wound healing and is often used to manage difficult, recalcitrant wounds. By adding collagen to the wound we are able to deliver local collagen for protein synthesis in the wound bed and promote better healing.

Traditionally these wounds have been managed with normal saline dressings. These should be applied as a wet to moist dressing but all too often are wet to dry. Another commonly used dressing has been quarter strength Dakin's solution or acetic acid in the wounds. A better option is the application of collagen directly into the wound.

amorphous gel



Occasionally we were able to use xenografts or extra cellular matrix to help cover the wound but this required the complete cooperation of the patient. This modality was only an option in less than 10% of the patients. Traditional skin grafts were not a good option since it would have created not only a second wound to manage but an easy drug access point in a population that is usually uncooperative.

In our experience, collagen was a valuable tool in facilitating closure of these wounds. Collagen is available in a variety of forms. The collagen used in this setting was Stimulen Collagen by Southwest Technologies, Inc.. Collagen powder is readily available in most settings. In order to create a moist wound environment, it can be mixed with a hydrogel to form a slurry that can then be covered with a simple moist gauze dressing. In this particular patient population, it is very important to have someone at home to help with dressing changes since the majority of these patients do not qualify for home health.

collagen gel



The use of the collagen powder mixed with a hydrogel or a collagen gel proved very effective. The results were an overall reduction in time to heal to less than four weeks in the vast majority of patients. They were then able to go into a detoxification program and stop using narcotics.

collagen lotion



It is important to remember that this does not represent necrotizing fasciitis, but a form of soft tissue necrosis secondary to MRSA or VRE directly injected into the skin (skin popping) or in the peri-vein causing suppurative thrombophlebitis.



Richard Schlanger, MD, PhD, FACS, FACWP
Associate Professor of Surgery, the Ohio State University



SOUTHWEST TECHNOLOGIES CONGRATULATES THE WOUND CARE EDUCATION INSTITUTE®

WOW 2016 SETS RECORD BREAKING ATTENDANCE OF 1,257 ATTENDEES STRONG

Wild on Wounds® (WOW) is a national wound conference designed for healthcare professionals. Clinicians come from all over the US to see, touch and participate in their hands-on workshops. This is truly a conference you can attend, fly home on Sunday and practice what you've learned on Monday! Participants can CATCH A BUZZ by attending The Buzz Report where you find the latest and greatest of what is new in the wound care space such as new products, resources and tools to enhance your skills.

For more information on The Wound Care Education Institute® (WCEI) please visit their website at:
<http://www.wcei.net/about#ixzz4KocEIryJ>

Upcoming USA Events

Mid-East WOCN
Sept 29 - Oct 1, 2016
Louisville, KY

SAWC Fall Conference
Oct 7-9, 2016
Las Vegas, NV

Mid- Atlantic - WOCN
Oct 28 - 29, 2016
Richmond, VA

NorthEast - WOCN
November 11 -13, 2016
New York, New York

Upcoming Global Events

Eliminating Heel Pressure
Ulcers
Oct 5, 2016
Birmingham UK

Management of the
Diabetic Foot
Oct 12-15, 2016
Pisa, Italy

Inaugural Wounds
Australia Conference
Nov 9-12, 2016
Melbourne, AU

Pressure Ulcers Summit
Dec 7, 2016
Manchester, UK



Kimbra Sabine, Northeast Regional Manager for SWT is being filmed on the use of Hydrogels by the WCEI Team.



Tribute to CEO and Founder of Southwest Technologies, Dr. Edward Stout



WOW sponsors



SWT provided entertainment for the WOW Dance Party.



SWT Booth at WOW



Michael Sabine, New England Region at the SWT booth demonstrating product.

CLINICAL CORNER

MEETING THE CHALLENGE OF DIABETIC FOOT WOUNDS WITH STIMULEN®

Diabetic foot ulcers have always been among the most difficult chronic wounds to manage. The diabetic foot wound is complex and the causative factors are equally complicated. They are often thought to be the result of poorly managed diabetes; the chance of a foot ulcer developing in the presence of Type 1 or Type 2 diabetes is commonly cited as 25%. Every diabetic ulcer should be considered serious since 2/3 of all non-traumatic lower leg amputations are attributed to these ulcers.

Managing a diabetic ulcer should begin with prevention and prevention begins with education. Everyone diagnosed with diabetes should receive comprehensive diabetic education. This education should be reinforced to help prevent complications such as diabetic foot wounds from developing. Education should also be provided to clinicians at all levels. This education should include early recognition and management of diabetes and pre-diabetes. In addition, clinicians should be adept at neuropathy assessment, correctly grading a diabetic ulcer, and knowledgeable about appropriate management options.

Diabetic foot ulcers are typically found on the plantar surface of the foot. Because of the presence of sensory, autonomic, and/or motor neuropathy, patients may not be aware of a wound until it becomes severe. A daily foot assessment is recommended for anyone with diabetes. Any change in the integrity of the skin, or areas of increased redness or warmth should be a reason for alarm. With advanced diabetes, retinopathy may affect the ability to visualize the foot. Patients who are less mobile secondary to obesity, or joint limitations may have the same challenge with seeing the bottom of their foot. Blood or drainage on a sock may be the first indication of a problem.

These wounds are the result of repetitive pressure and as a result of that repetitive pressure, callous is often noted. In a foot with normal sensation, callous can serve a protective function and develops over a broader area. With neuropathy, callous over a high risk area such as a metatarsal head may be concentrated specifically over the bony prominence. This may be a precursor to the development of an ulcer. After the ulcer has developed, it is common to see peri-wound callous on the initial assessment. A common treatment strategy is to sharply debride the callous and any nonviable tissue in the wound base. Callous that redevelops after treatment has been initiated is an indication that offloading is not consistently being done.

The unique challenges posed by diabetic foot wounds include addressing their polymicrobial nature, inadequate vascular supply, neuropathies, and often the underlying tissue changes from a previous diabetic ulcer. It is logical that tight glucose control and optimal nutrition would play a critical role in healing a diabetic foot ulcer, but research has not been able to support that logic. Nutritional supplementation has only been shown to be valuable when malnutrition is present.

Successful wound closure should result in a 40-50% reduction over a period of 4 weeks. Traditional management has combined moist wound healing with more advanced therapies such as negative pressure wound therapy, hyperbaric oxygen treatments, cultured human dermal grafts, growth factors in an attempt to achieve this level of healing. All of these are appropriate but costly modalities.

Understanding the role of moist wound healing and topical dressings is critical in all wound care but especially in the management of a diabetic foot ulcer. Collagen, and specifically Stimulen® collagen is able to effectively replace the need for the majority of the more expensive treatment options. Research has shown that Stimulen® effectively "jump starts" the healing cascade in a chronic wound by initiating a robust inflammatory process that mirrors normal inflammation. Additional research studies have shown that Stimulen® can create angiogenesis with the development of new and functional blood vessels. Since most diabetic foot wounds, with the exception of a Charcot foot deformity, are poorly vascularized, this is an important adjunct to healing. Another important feature for diabetic foot wounds is that Stimulen® can elongate Rete Pegs anchoring dermis and epidermis together. This becomes important because diabetic foot wounds have a very high recurrence rate and elongated Rete Pegs helps reduce the chance for a recurrence.

Over the years, as the science of wound care has advanced, the cost of quality wound care has climbed as well. These escalating costs have placed quality wound care out of the reach of some individuals. Without quality wound care, a diabetic foot ulcer advances and can all too often can lead to a devastating and life changing lower limb amputation. Stimulen® can effectively address this disparity and provide effective and affordable wound care for all.

Diana Gallagher, MS, RN, CWOCN, CFCN

PAYING IT FORWARD

SOUTHWEST TECHNOLOGIES, INC. SUPPORTS MISSIONARIES OF THE POOR USA, WOUND HEALING EFFORTS IN HAITI AND JAMAICA

Our Lady's Wound Care Project came about when a retired Public Health Nurse, Ms. Joanne Harnett, BS, RN, PHN first volunteered in Jamaica. She stated that none of the patients she saw could recall when they first developed their ulcers and the suffering she saw moved her to do something to help. In Jamaica she has 650 patients with new ones arriving everyday and Haiti around 200. The need for wound care supplies is ongoing. They care for the poor, marginalized, and the ones abandoned by society.

Southwest Technologies answered their prayers by sending Elasto-gel, Stimulen and Gold Dust to support the continuum of care in both Missions.

We the people of Southwest Technologies, Inc. recognize that we have responsibilities of coming together as one to understand that our destinies are bound together; that a freedom that only ask what's in it for us, is a freedom without commitment to others; a freedom without charity is unworthy of our founding ideals of "Treating the World Well"®.

"Treating the World Well"® / Oath shared by leadership

More than a company tag line, our company brand is this message in action! During this third quarter, The American Diabetes Association - Step Out / Walk To Stop Diabetes enabled our engagement to support the 1:11 people whom will be affected by diabetes.

RED STRIDERS are why we are engaged!

RED STRIDERS are children and adults who have Type 1, Type 2, Gestational or Pre-Diabetes. If you are a **Red Strider**, **YOU** are the reason we show up and support volunteer walkers through Step Out / Walk to Stop Diabetes to help find the cause and cure of this "silent disease."

Celebrating **RED STRIDERS**



With the American Diabetes Association, we work each and every day to imagine a life free of diabetes and all of its burdens. We are an organization committed to helping children and adults with all types of diabetes, as well as, those at risk. In addition to our volunteer hours, Red Strider participation enables those persons, through illness and/or injury, to have access to supportive products that help manage their condition.

Visit www.swtechnews.com today to get the latest information about diabetes and how ELASTOGEL™ GOLD DUST® and STIMULEN® can become a go to for you to share with your physician.



SOUTHWEST TECHNOLOGIES is helping to imagine a life free of diabetes and all of its burdens.

If you have diabetes and would like a no-cost sample of our Elastogel™ Wound Dressing for those cuts, scrapes and skin tears that left untreated could become more of a burden to someone with diabetes, please contact - Cindy Belt at cbelt@elastogel.com or call 816-221-2442 and ask for Customer Service.



Aloha Samoa Missions where Rich Smith attending WOW conference reached out to Southwest Technologies as they gather necessary supplies for another medical missions trip. Quality wound supplies for clinics are of real need for surgeries, wound treatments and injuries.

Southwest Technologies often lends helping hands as a global company with a global footprint in the States and Abroad. Medical mission work is the action of the company motto Treating the World Well. Thank you Samoa Medical Mission for the necessary medical care that comes to those in need.

TESTIMONIALS & TRIBUTES

Dear Madam or Sir:

I am a seventh grade student and I am writing to tell you how much I admire your Elasto-Gel Therapy Wrap with the Patella Hole. Your knee wraps never fall off so I can enjoy the full healing experience. Another thing that adds to this experience is that the wrap can stay cold for a whole 45 minutes. Lastly, just to add to all of it's greatness, your product smells good. The coldness and fresh scent is extraordinary wonderful. I can practically use your product before and after any type of sporting events such as my basketball games and my track meets. I always use your products before and after my practices as well. Some days when I had a really long practice involving lots of horses and running drills and my knees are struggling and then just to add to that I have an ridiculous amount of homework, I don't have time for icing. Then I can just ice myself while I sleep. Also ice-cream leaked onto the knee wrap which takes away from its formerly great smell. Now it just smells like a mint chocolate chip. Anyways thanks for treating the world well.

Sincerely,
Trey LaFleur

To Whom it may concern:

I am a 47 year old female and was in a terrible car wreck. I had to have 3 metal plates and 20 screws in my right leg. During my physical therapy they used your gel wrap on me. They wrapped it around my affected area and used the Velcro to secure it. It cooled and calmed the area and also helped with swelling.....It's awesome.

Thank you for an awesome product.

Sincerely,
Debbie

Dear Dr.Stout,

Thank you for creating such and effective product-Elasto-Gel. Also I am impressed with your customer service. Your professionalism and pleasantness with which I was treated was refreshing. Your product and people are top notch. I will definitely refer people to your items. I can't find anything that holds heat so effectively for as long. Be pride of your product line(s).

Thanks again for the innovation.

Sincerely,
Therese M. Gyauch

To whom it may concern!

I wish to tell you how greatly I appreciate your kindness to me. I have a venous ulcer on my left leg about the size of a ladies palm. YOUR KINDNESS MEANS SO MUCH TO ME! It finally after 5 months is beginning to grow skin and the collagen is such a help, but we could only get the small pack per month from Medicare. We greatly appreciate your help. I think it will be enough to complete the work and thanks so much for everything. May God Kindly Bless you and yours.

Sincerely,
Dixie Wood "I will be 85 in March"

southwest technologies inc. Product Spotlight



Stimulen[®] enhanced collagen woundcare

Stimulen[®] is a new collagen formulated in 3 different forms. Stimulen[®] Powder is 100% collagen powder.

Stimulen[®] collagen products are composed of long and short polypeptides. The long strands offer a "bridge" to connect wound edge to wound edge providing a lattice. The short polypeptides are broken down in the amino acid form so that the body can use immediately. These products are ideal for stalled wounds or for compromised patients - i.e. diabetes,

pressure ulcers, venous and stasis ulcers. It has been reported that the amorphous gel works well on diabetic wounds and wounds with exposed tendon or bone. The product line offers many choices and solutions for each patient's condition. Published research has shown Stimulen[®] provides:

- Increased recruitment of inflammatory cells to the wound site, an important step in preventing infection, and promoting healing of the wound.
- Greater collagen I:III ratio in the wound, indicative of greater tensile strength, and resistance to reopening caused by shear stress.
- Increase in length of rete ridges re-establishes healthier skin that is well nourished and more resistant to reopening.

vigorate gel



ST9550 15g vigorate, 12 btls/cs

collagen powder



ST9501	1 gr powder, 10 pk/bx, 10bx/cs
ST9515	10 gr powder, 12 btls/cs
ST9520	20 gr powder, 12 btls/cs

collagen lotion



ST9555 2 oz lotion, 12 btls/cs

amorphous gel



ST9502	0.5 oz (15 gr) collagen gel, 12 tubes/cs
ST9503	1 oz (30 gr) collagen gel, 12 tubes/cs

collagen gel



ST9505	1 oz collagen gel, 12 tubes/cs
ST9508	0.5 oz collagen gel, 12 tubes/cs