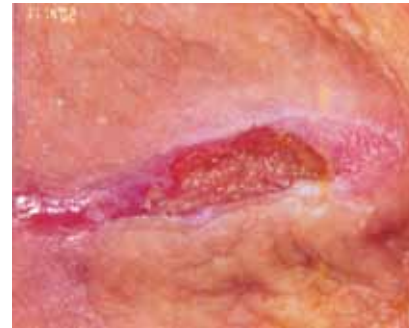


Photo 3: 11/14/02



**Photo #3** - Follow up visit. Measurement of wound on 11/07/02 was L 1.9cm x W 0.6cm. Measurement on 11/14/02 was L 1.0cm x W 0.4cm.

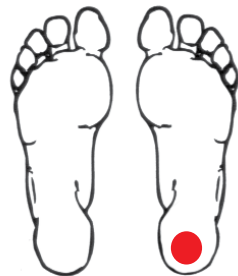
**Protocol:** Remained unchanged throughout the treatment. The wound steadily granulated and was pain free without infection throughout the treatment program and resulted in complete closure with minimal scarring.

Photo 4: 11/27/02



**Photo #4** - On 11/21/02 wound measurement was L 0.5 cm x W 0.5cm. Final visit on 11/27/02 the wound was healed. This wound healed in twenty-eight days.

### Case #4:



An eighty-nine year old nursing home resident with black eschar of the left heel.

Photo 1: 1/7/04



**Photo #1** - The patient who was cared for in a Nursing Home under our consultation ; presented to our clinic 1/07/04 after a three week duration of black eschar of the left heel. Previous treatment was pressure relief and cleansing bi-weekly and covering heel with a glycerine sheet. Initial assessment revealed a L 2.0cm x W 3.5cm thin eschar covered heel.

**Protocol:** To continue with the goal of treatment being: protection of the area, prevention of infection and further dehydration of the eschar providing for easy removal.

**Photo #2, #3 and #4** - One week later and the final visit on 1/15/04. As evidenced by the photos the eschar was (easily) mechanically removed from the heel revealing an intact non-infected healed wound.

Photo 2: 1/15/04



Photo 3: 1/15/04



Photo 4: 1/15/04



**Discussion:** This poster demonstrates the general principles of how to use the glycerine based gel sheet dressing in combination with other products and at different stages of wound healing to achieve the most cost effective outcomes, while providing patient comfort, wound protection, prevention of infection, and simplicity of dressing change. In addition, we have also shown the unique ability of this dressing to dehydrate black heel eschar, while retaining an optimal healing environment for the granulation and epithelialization of the wound under the eschar. We use this technique routinely for this type of heel wound as well as, for treatment of hematoma wounds. This procedure allows for protection of the wound by keeping the damaged skin and tissue in tact and protected from bacterial invasion while the new tissue and skin form under this protective cover. When the wound is fully epithelialized this protective cover simply crumbles away (with a little mechanical abrasion) as exemplified in this series of photos. It is often appropriate to change treatment modalities at different time intervals during the healing process, as well as, use combination therapies to have successful, cost-effective wound closure.

**Conclusion:** Bacteriostatic glycerine gel sheets were effective for treatment of these wounds due to it's cushioning, ease of use, moist environment, absorption, and minimal scarring. The bacteriostatic properties of the gel dressing coupled with additional absorption of the alginate allowed for longer wear time and fewer nursing visits, and aiding in cost containment. These varying wounds healed in an average of thirty days.



ph: (816) 221-2442 (800)247-9951 fax: (816) 221-3995  
e-mail: info@elastogel.com ● www.elastogel.com

# CLINICAL CASE STUDY DEMONSTRATING A VARIETY OF WOUNDS EFFECTIVELY HEALED UTILIZING A "HYDROGEL SHEET" ON A DIVERSE PATIENT POPULATION

Clinicians: Ruth Anderson, RN, CARS and Char Wilkening, RN, CARS  
Bone County Hospital, Bone, Iowa

## ABSTRACT

Four cases of diverse patients are presented:

- Case #1:** Diabetic construction worker with three month duration of non-healing foot ulcer. The wound was cleansed daily; covered with calcium alginate and covered with a hydrogel sheet.\* Alginate was discontinued after two weeks. Healing occurred without infection in twenty-eight days.
- Case #2:** Elderly patient with non-healing burn on foot. Wound cleansed daily and covered with hydrogel sheet (week two and three; hydrocolloid sheet used to enhance autolytic debridement). Wound healed in fifty-six days without infection and minimal scarring.
- Case #3:** Patient with partial thickness non-healing painful post-operative wound of elbow complicated by cellulitis and sepsis. Cleansed with shower - filled with hydrophilic powder and covered with hydrogel sheet. Healing occurred in twenty-eight days comfortably, infection free and minimal scarring.
- Case #4 :** Nursing Home resident with three week duration eschar covered heel. Bi-weekly cleansing and covered with hydrogel sheet. Healing occurred in eight days.

\* Glycerine based hydrogel(Elasto-Gel™)

For all wounds, a hydrogel sheet was selected due to:

- conformability
- bacteriostatic/fungistatic properties
- comfort
- affordability/cost effectiveness
- absorption of hematoma
- cushioning effect
- ease of use

**Objective:** At the end of this presentation the participant will be able to:

- Develop a treatment plan utilizing an affordable patient manageable dressing for a variety of wounds.
- Describe the potential benefits to a patient's care when utilizing a hydrogel sheet.

Presented at the Clinical Symposium on Advances in Skin & Wound Care  
Phoenix, AZ  
September 30 - October 3, 2004

### References

Habif, Thomas P., Cambell Jr. James, L., Quitadamo, Mark J., Zug, Kathryn A., *Skin Disease (Diagnosis and Treatment)*, USA - Mosby Inc., 2001  
Fowler, Evonne M. (RN, CNS, CWOCN), Vesely, Noreen (MBA, RN, CWOCN), Johnson, Vivan (RN, CWCN), Harwood, Judy (RN, CWOCN), Tran, Jennifer (DPM) , and Amberry, Thomas (DPM), "Wound Care for persons with diabetes", *Home Healthcare Nurse* vol. 21 • no. 8, 531-539 August 2003



# CLINICAL CASE STUDY DEMONSTRATING A VARIETY OF WOUNDS EFFECTIVELY HEALED

## UTILIZING A “HYDROGEL SHEET” ON A DIVERSE PATIENT POPULATION

### Case #1:

A fifty-one year old diabetic “construction worker” with three month non-healing wound of the great toe.

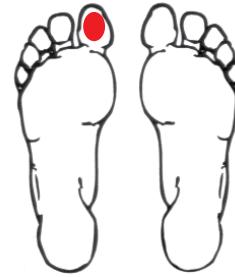


Photo 1: 1/29/04



**Photo #1:** The patient presented to the clinic with a partial thickness non-healing wound of the great toe of three month duration. Previous treatment by the attending physician was Betadine® and gauze. Initial assessment of the wound revealed macerated

periwound skin and moderate serosanguineous drainage. The wound measured L 1.2cm x W 2.3cm and depth 0.5cm.

**Protocol:** The wound was cleansed daily with a shower. Then a calcium alginate was applied followed by the secondary dressing which was a glycerine gel sheet. The goal of initial treatment was to prevent infection, control drainage and protect the area to allow the patient to continue work.

Photo 2: 2/5/04



**Photo # 2** - One week later. The maceration was resolved and 100% granulation tissue present in the wound bed. Drainage was controlled and the patient reported that the dressing was comfortable. The measurements were greatly reduced and the wound remarkably improved. Measurements were L 0.3cm x W 0.8cm and depth 0.2cm. Treatment remained the same except the patient was instructed to use the calcium alginate only as needed.

Second follow up visit was on 2/11/04. Measurements were L 0.4 cm x W 0.3 cm and depth 0.1cm. The calcium alginate was discontinued and the glycerine sheet was continued.

Photo 3: 2/25/04

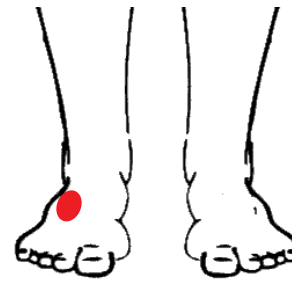


**Photo #3** - Final follow up visit on 2/25/04. The three month non-healing wound was essentially closed in the twenty-eight days after starting the new protocol. There was no clinical signs of infection. The exudate management and dressing change was easy for the patient. Protection provided by the hydrogel sheet allowed the patient to continue job function.

by the hydrogel sheet allowed the patient to continue job function.

### Case #2:

An eighty-four year old man with a two week non-healing thermal burn of the right lateral foot.



**Photo # 1** - Initial visit to the wound clinic on 1/15/04. The patient presented with a non-healing thermal burn of the lateral foot. Initial assessment of the area revealed a 100% black eschar covered wound measuring L 1.7cm x W 1.6cm.

**Protocol:** The wound was cleansed daily with a shower, rinsed thoroughly and covered with a glycerine sheet. The goal of initial treatment was to prevent infection, protect the area, and dehydrate the eschar to allow for easier debridement.

Photo 1: 1/15/04



Photo 2: 1/21/04



**Photo #2** - One week later on 1/21/04. Measurements unchanged, however the eschar had loosened and was easily removed by sharp debridement revealing periwound inflammation and deep tissue damage.

**Protocol:** Continue glycerine sheet with addition of a topical antibiotic to wound bed.

Photo 3: 1/29/04



**Photo #3** - Second follow up visit on 1/29/04. The periwound skin inflammation had decreased; however the measurements were unchanged and the wound bed was covered with slough. Therefore, the protocol was changed to chemical debridement, calcium

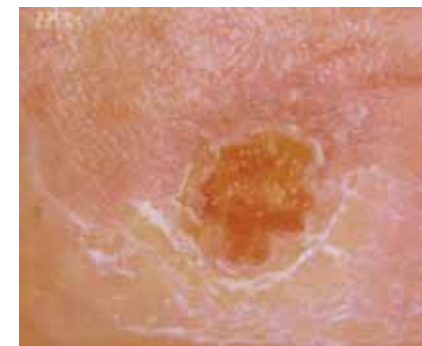
alginate and hydrocolloid sheet to further enhance debridement. The dressings were changed weekly and this protocol continued for three weeks.

**Photo #4** - Fifth follow up visit on 2/19/04. Wound measured L 1.1cm x W 1.6cm and wound bed was 100% vascular. The protocol was changed to utilizing the glycerine sheet as previous.

Photo 4: 2/19/04



Photo 5: 2/25/04



**Photo #5** - Sixth follow up visit on 2/25/04. Wound measured L 1.0cm x W 0.8cm with a 100% granular wound bed. Same protocol continued.

**Photo #6** - Final follow-up visit on 3/10/04. Wound was closed. The non-healing thermal burn wound closed in fifty-six days without infection and with minimal scarring.

Photo 6: 3/10/04



### Case #3:

A fifty-two year old female with a non-healing partial thickness painful post operative wound.

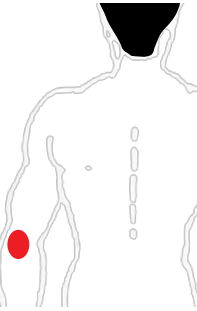


Photo 1: 10/10/02



**Photo #1** - Initial visit on 10/10/02. The patient presented at wound care clinic from Nursing Home with a painful non-healing post-operative wound of the left elbow following dismissal from the

hospital on 10/3/02 and four weeks of treatment of the area. Initial assessment revealed 100% vascular wound with slight creamy drainage. The area measured L 3.5cm x W 0.5cm with undermining measuring from 0.4 cm to 1.2 cm around the wound bed. The depth was 0.2 cm. The goal of initial treatment was to control pain, protect the wound from pressure, shearing and friction and prevent infection.

**Protocol:** To cleanse daily with a shower rinse thoroughly and sprinkle a hydrophilic powder into the wound and cover with a glycerine sheet.

**Photo #2** - Second follow up visit on 10/24/02. Measurement of wound was L 2.4cm x W 0.7cm with undermining only present in one area measuring 0.3cm. The depth was unmeasurable.

Photo 2: 10/24/02



**Protocol:** Remained the same.