

CLINICAL STUDY DEMONSTRATING ESCHAR DEBRIDEMENT AND WOUND HEALING IN A BACTERIOSTATIC ENVIRONMENT UTILIZING A HYDROGEL SHEET

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ABSTRACT

This case study demonstrates the use of a special glycerine sheet dressing that assists in the healing process and reduces the chance of infection in a heel ulcer. Although a number of posters have been presented on the effectiveness of the glycerine sheet dressing for prevention and management of pressure ulcers, the question of the how to manage eschar covered heel ulcers persists. We routinely manage these wounds by covering them with the bacteriostatic/fungistatic glycerine dressing. This dressing is simple to use and we have found that it has always prevented infection in these wounds. This poster demonstrates the result that is typically observed with this dressing even with patients with highly compromised immune systems.

A frail elderly patient with chronic obstructive pulmonary disease and diabetes, who resides at a nursing home, presented at wound clinic with an eschar covered heel. The area measured 4.0 cm width x 3.1 cm length and was covered with black eschar. Initial treatment was cleansing of the area and covering with a glycerine based hydrogel sheet. The nursing home was instructed to change the dressing twice weekly and as needed. The peri wound skin was moisturized twice daily.

At two weeks the wound measured 2.0 cm width x 2.0 cm length. At this time the dressing had dehydrated the eschar so that easy removal was accomplished revealing active fibroblasts throughout the stage III wound bed. Based on the healthy wound bed and previous experience, the treatment plan remained unchanged.

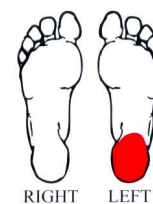
Healing continued at each clinic visit as noted by the smaller size of the wound and the clean healthy wound bed. The wound was healed in sixty-four days with no signs or symptoms of infection throughout the whole healing process.

The hydrogel sheet provided a bacteriostatic environment and absorption of wound fluid causing dehydration of the eschar. Other benefits of using this dressing included its cushioning effect, quick efficient dressing changes, and reduced nursing time. In addition, the high glycerine content kept the eschar pliable, which allowed wound healing and reduction of wound size even with the eschar intact. It also made the removal of the eschar a simple one step process when the time to do so occurred. These factors made this a simple and effective treatment for healing this wound.

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CLINICAL CASE STUDY ATILIZING A NEW "COLLAGEN GLYCERINE GEL SHEET" TO HEAL CHRONIC NON-HEALING PARTIAL THICKNESS WOUNDS

Case study involves a eighty-two year old nursing home client with a black eschar covered heel.



Initial Visit to the wound care clinic 10/17/02 ~ Photo 1

The unusual shape of the eschar required two measurements. Anterior area measured 4.0 cm width x 3.1 cm length. Posterior area measured 2.0 cm width x 0.1 cm length. The back of the heel was beefy red. The goal of initial treatment was prevention of infection, protection of the area and dehydration of the eschar to allow for its easy removal.

Protocol: The area was covered with a glycerine gel sheet.

Two weeks later 10/31/02 ~ Photo 2

The eschar was dry, loosened, and easily removed from the heel revealing a well hydrated, vascular, non-infected wound. The anterior area measured 2.0 cm width x 2.0 cm length and the posterior was healed. The glycerine sheet was effective in dehydrating only the eschar and maintaining the viable tissue below. No signs or symptoms of infection. Heel was bloody and 100% vascular.

Protocol: Same protocol continued.

Follow-up visit 11/07/02 ~ Photo 3

The anterior wound measured 2.0 cm width x 1.3 length. The wound bed was beefy red with granulation evident. No signs or symptoms of infection.

Protocol: Same protocol continued.

Follow-up visit at five weeks 11/21/02 ~ Photo 4

At week five the wound is nearing closure measuring 0.3 cm width and 1.3 cm length. Patient is comfortable and has no signs or symptoms of infection.

Protocol: Same protocol continued.

Follow-up visit at nine weeks 12/19/02 ~ Photo 5

The wound is totally healed in sixty-four days.

Conclusion:

The glycerine hydrogel sheet was effective in protecting the wound while the absorptive properties dehydrated the black eschar. The excess fluid was extracted which allowed for easy removal of the eschar causing no trauma or damage to the wound bed. The hydrogel glycerine sheet was used effectively to maintain a bacteriostatic moist wound environment for complete closure of the wound.

The benefits of using the glycerine hydrogel dressing in this case study were :

- the ability to use the dressing for several days per patient use
- the ability to absorb excess moisture as well as extract denuded tissue and debris from the wound site
- the ability to heal the wounds with minimal or no scar formation
- the ability to offer "pain free" dressing changes
- the ability to reduce nursing time/dressing changes
- the ability to reduce overall costs
- the ability to keep the wound site "infection free"



Photo 1: 10/17/02

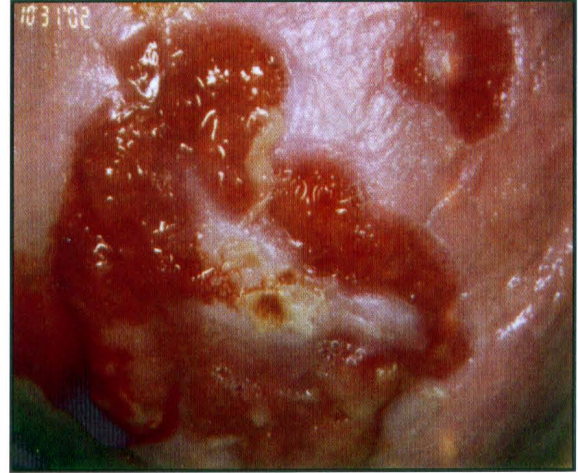


Photo 2: 10/31/02

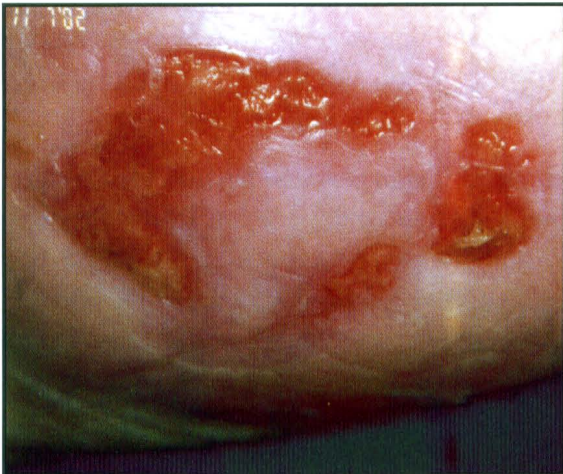


Photo 3: 11/07/02



Photo 4: 11/21/02



Photo 5: 12/19/02

product used:  **Elasto-Gel**[™] glycerine gel sheet