# IMPRESSIVE HEALING AND SCAR REVISION FOR MASSIVE FULL THICKNESS TRAUMA TO SOFT TISSUE USING COMBINED TREATMENT MODALITIES

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### **ABSTRACT**

Two gaping infected wounds with extensive edema, eschar and slough on a young boy's leg, which had been caused by a motorcycle collision with a pick up truck, were successfully healed in three months, with minimal scarring and elimination of infection due to the use of a bacteriostatic absorbent gel sheet dressing\* in combination with other treatment modalities.

The various treatments included mainly the use of a bacteriostatic absorbent gel sheet dressing in combination with an enzymatic debridement ointment alternating with the use of a combination alginate/hydrocolloid/sharp debridement.

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# IMPRESSIVE HEALING AND SCAR REVISION FOR M

#### PROBLEM:

Gaping infected wound with extensive edema, eschar and slough on a young boy's leg caused by a motorcycle collision with a pick up truck.

#### **OBJECTIVE:**

Reduce edema, free the wound of eschar and slough, and reduce the bio-load while promoting wound healing.

#### METHODOLOGY:

- + The initial emergency treatment room of the 11cm x 12cm and 7cm x 11cm lacerations consisted of irrigation, suturing, and of an x-ray to rule out fractures. The dressings consisted of antibiotic ointment and petroleum dressing.
- + Three weeks later the patient was referred to the wound care

clinic with gaping wounds. Because the wounds were infected and had extensive edema, eschar and slough, a bacteriostatic absorbent sheet dressing (Elasto-Gel™) was applied to decrease edema and preserve viable tissue which included adipose tissue. Since the eschar and slough were interspersed with adipose and viable tissue, a conservative debridement with an enzymatic ointment was the treatment of choice.

Measurements of the lower wound and upper wound were respectively 10.7cm x 3.2cm and 20cm x 4cm. This bacteriostatic absorbent sheet dressing was used for three weeks.

- + Results at the end of three weeks: The eschar in the upper wound was reduced from 100% to 50% and from 60% to 50% in the lower wound. The wounds were no longer infected, they had increased vascularity, decreased edema and the adipose tissue remained viable.
- + The treatment plan was changed to a hydrocolloid dressing with an enzymatic debrider to enhance autolytic debridement. A calcium alginate was used under the dressing to contain the drainage and increase wear time. The dressing was changed as needed. After three weeks use of the hydrocolloid and weekly sharp debridement, the slough decreased to 10% on the lower wound and 15% on the upper wound. However a yeast infection and maceration developed around the periwound skin.
- + The treatment plan was therefore altered for another two weeks to include the use of an antifungal cream on the periwound skin, a hydrophilic powder to stimulate fibroblast growth and a bacteriostatic absorbent gel sheet dressing (Elasto-Gel<sup>DS</sup>) for healing of the wound and patient comfort. The treatment plan was well accepted by this young patient due to its ease of use, comfort and odor control.

## **RESULTS:**

The final combination dressing effectively healed this traumatic wound with 100% granulation tissue present after two weeks. The wound continued to heal and scared completely in six weeks. At the last clinic visit the wound was covered with a foam dressing to protect it.

#### **CONCLUSIONS:**

This traumatic wound was healed in three months with minimum scarring and the elimination of infection due to the use of a bacteriostatic absorbent gel dressing (Elasto-Gel™) in combination with other treatment modalities.

06-14-96

# ASSIVE FULL THICKNESS TRAUMA TO SOFT TISSUE

Wounds prior to treatment at the first visit to the wound care clinic.



Upper wound 07-02-96

Lower wound 07-02-96

After one week of treatment with Elasto-Gel and enzymatic debridement



Upper wound 07-09-96



Lower wound 07-09-96

After two weeks back on Elasto-Gel and hydrophilic powder/fungistat cream



Upper wound 08-27-96



Lower wound 08-27-96

Healing three months after initial clinic visit and following intermittent Elasto-Gel treatments



Upper wound 10-08-96



Lower wound 10-08-96