

# **SECOND DEGREE FLASH BURN-CLINICAL CASE STUDY DEMONSTRATING POSITIVE PATIENT OUTCOMES USING A HYDROGEL SHEET\* DRESSING**

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This abstract is a case study of a female who sustained second degree flash burns over twenty-five percent of her body following a propane explosion in a recreational vehicle. This accident resulted in scorching, blistering and peeling of both anterior feet, legs, right forearm and right and left hand. The patient presented in severe pain. She was admitted to the hospital for pain control, daily whirlpool and dressing changes using silver sulfadiazine and gauze, with observation for any signs or symptoms of infection. Additional potential problems were nutrition and scarring with potential contracture. Serum protein albumin dropped. The gauze dressings were uncomfortable and required frequent changes due to strike through.

A revised treatment plan (12 days later) was requested to reduce pain and control infection while allowing the patient to maintain activities of daily living (ADL's) and adequate nutritional intake. An environment which would hold serum protein on the wound bed was important. A hydrogel sheet\* replaced gauze in the treatment plan.

This patient was dismissed in ten days with pain reduced to allow ADL's and adequate nutritional intake, with no sign or symptoms of infection. These extensive flashburns were healed in 74 days with no scarring or contracture.

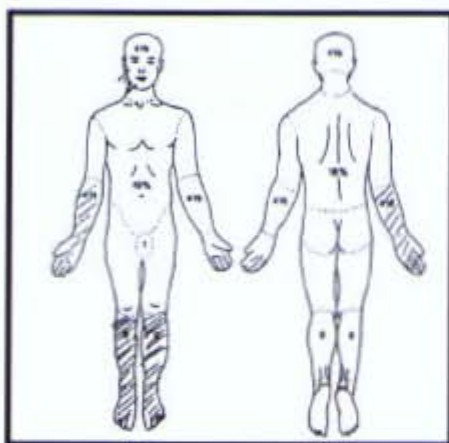
Conclusion: the benefits of using a hydrogel sheet\* in place of gauze were:

- Pain Reduction
- Controlled Infection
- No Scarring
- Absorption of Serious Drainage

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## PROBLEM:

On 6/7/95, a forty-one year old female sustained second degree flash burns over twenty-five percent of her body following a propane explosion in a recreational vehicle. This accident resulted in scorching, blistering and peeling of both anterior feet, legs, right forearm and right and left hands. The patient presented in severe pain. She was admitted to the hospital for pain control, daily whirlpool and dressing changes using silver sulfadiazine and gauze, with observation for any signs or symptoms of infection. Additional potential problems were nutrition and scarring with potential contractures. Serum protein albumin dropped. The gauze dressings were uncomfortable and required frequent changes due to strike through.



## RATIONALE:

On 6/19/1995 (12 days later) a revised treatment plan was requested to reduce pain and control infection while allowing the patient to maintain activities of daily living (ADL's) and adequate nutritional intake. An environment which would hold serum protein on the wound bed was important.

## METHODOLOGY:

A hydrogel sheet\* replaced gauze in the treatment plan.

## RESULTS:

This mother of four was dismissed in ten days with pain reduced to allow ADL's and adequate nutritional intake, with no signs or symptoms of infection. These extensive flashburns, covering twenty-five percent of the body, were healed in 74 days with no scarring or contractures.

## CONCLUSION:

Benefits of using a hydrogel sheet\* in place of gauze were:

- Pain Reduction
- Controlled Infection
- No scarring
- Absorption of serious drainage

## REFERENCES:

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Legs & Feet



Legs



Feet



Arm & Hand



6/18/95 24 hours 2nd & 3rd degree burns pink areas, debridement occurring.

# DEMONSTRATING POSITIVE PATIENT USING A HYDROGEL SHEET\* DRESSING

Feet



Leg



Arm



Hand



6/20/95 - 3 days epithelialization progressing, debridement nearly complete.

Legs & Feet



Legs



Arm



Arm & Legs



7/21/95 - 34 days.

Feet



Legs



Arm



Hands



8/31/95 - 84 days smooth supple healing. Complete skin cover. No visible scar.

\*Elasto-Gel - Southwest Technologies

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