

## Presentation

Sixth Congress, European Burns Association  
Verona, Italy September, 1995

### **Wound Management of Burns in Children**

Dr. J. Baksa, S. Gyori, A. Veress  
St. Janos Hospital, Department of Pediatric Surgery

1. When asking what?, when?, and why? for treatment of the wound; The answer is very simple: use the most suitable method and the best local agent that is best for each wound on the patient, always.

In wound therapy, choosing the topical agent to be used is very important, because the efficacy can determine or at least influence to a significant degree the healing time, the quality of the scar or skin, and the cost/price of the total treatment.

2. The silver nitrate solution, the silver sulfadiazine cream and the Betadine solution are used most frequently in our unit. These are our generally used topical agents.
3. These local agents are used according to protocols developed in our hospital: e.g.

We use silver nitrate solution, because necrectomy becomes easier for us, as dressing before and after necrectomy and guards against infection by pyocyanus.

The silver sulfadiazine cream is used as dressing for cleaning the wound after necrectomy and for preparing the wound surface.

The Betadine solution is used for its effect of reepithelialization and for drying the wound.

Several local agents and methods of wound therapy are used in the burn care too.

We are being provided numerous samples and we are over-powered with the confusion of abundance!!! That is, we have so many new dressings, that we do not have time to even know where to start for evaluating them. The protocols of the most frequently used topical agents are well known.

There is nothing new under the sun. We used to say it often. And, that is true, really! The wet wound healing with occlusive dressings began 30 years ago, when Winter's study<sup>1</sup> demonstrated enhanced wound reepithelialization under occlusive dressings. Since then many more basic science studies, clinical trials, symposiums and congresses have discussed the advantages of the wet wound therapy.

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<sup>1</sup> Winter, GD, "Formation of the scab and the rate of reepithelialization of superficial wounds in the skin of the young domestic pig", Nature, 1962, 193:293-4

A very recent article describes many of the new dressings in the journal, Dermatologic Surgery, July, 1995. The title: “Moist Wound Healing with Occlusive Dressings” by GA Kannon and AB Garrett.

The use of wet wound therapy obviously optimizes the healing potential. One of the hydrogel products, that we have used, is the ***Elasto-Gel™*** Wound Dressings. The use of ***Elasto-Gel™*** was very effective in the different stages of wound healing in all the cases that we studied. This product is a glycerine-based hydrogel.

We studied the different indications for using the ***Elasto-Gel™***. And now, we ...???...on our studies of one hundred (100) patients!

We recommend the use of ***Elasto-Gel™*** for cleaning the necrotic tissue, after escharectomy or necrectomy. For temporary covering the necrotic tissue because the ***Elasto-Gel™*** conserves it. We use it for cleaning the suppurated, moderate infected, the hypergranulated and torpid wounds. We recommend the ***Elasto-Gel™*** for treatment and transient covering of deep dermal and subdermal burns, first of all, after necrectomy. We prefer the use of ***Elasto-Gel™*** for preparing of the wound before skin grafting, and last but not least, we have very good experiences in the prevention and treatment of pathologic and hypertrophic scars.

On the next slide you can see the extra-special indications for application of ***Elasto-Gel™***:

1. Deep, subdermal burns
2. Defect of tissues
3. Torpid wounds
4. Pathologic Scars

***Elasto-Gel™*** plays a very important role in the treatment of the different wounds and in the different stages of the wound healing.

We can hardly try out the newest developed products, there are so many in the world. It seems beneficial that the International Committee on Wound Management, which was established in 1992, has worked out a model evaluation program.

Indications are that their model can be used to measure cost effectiveness of the selected treatment, based on healing and other parameters of success and can be applied in all countries of the world.

An article such as in Dermatologic Surgery, July, 1995 may help in orientation and I believe that with our present lecture, which I have presented to this informational gathering can help to evaluate these numerous products.

## Local Agents for Deep Burns Used In Our Practice

What?	When?	Why?
AGNO <sub>3</sub> , 0.5% Solution	Before necrectomy	Makes the operation easier
	After necrectomy (wound infected by Gram-negative bacteria)	As a dressing against infection (reduce bio-count)
SSD 1% Cream*	After necrectomy	As a dressing
	Preparing of the wound surface	Cleaning of the wound, reduce bio-count
Betadine Solution	After grafting wound infected by Gram-positive bacteria	Epithelialization reduces chance of infection

\*Silver Sulfadiazine

## Use of *Elasto-Gel™* in Pediatric Surgical Practice

### Type of Wounds:

#### Traumatic Wounds - 18 Cases

1. *Elasto-Gel™* served only as a covering of the defect of tissue in 7 cases.
2. *Elasto-Gel™* used for biotic transforming of the torpid wounds in 6 cases.
3. *Elasto-Gel™* was used for cleaning the infected wounds in 5 cases.

#### Burn Wounds - 41 Cases

1. *Elasto-Gel™* used as a temporary covering for deep burns in 7 cases.
2. *Elasto-Gel™* used for covering superficial burns in 9 cases.
3. *Elasto-Gel™* used for preparing the wounds for autografting after necrectomy in 18 cases.
4. *Elasto-Gel™* used for treating torpid wounds in 7 cases.

#### Pathological Scars - 41 Cases

1. *Elasto-Gel™* was used for prevention of scars in 11 cases.
2. *Elasto-Gel™* was used for treatment of hypertrophic scars after operations and mechanical skin damage in 11 cases.
3. *Elasto-Gel™* was used for treatment after healing of burns in 19 cases.
4. *Elasto-Gel™* has been used under the pressure garments as additional therapy in 5 cases.

### Extra-Special Applications of *Elasto-Gel™*

Deep, Subdermal Burns

Defect of Tissues

Torpid Wounds

Pathologic Scars