

The *Elasto-Gel*TM Horseshoe Shaped Dressing for the prevention of sacral pressure ulcers

Problem: Formation of Pressure Ulcers on the Operating Room Tables

Introduction: It is well established that pressure ulcers often result after a patient has been on the operating table for an extended period of time. The treatment of pressure ulcers is very costly and in some cases can result in the death of a patient.

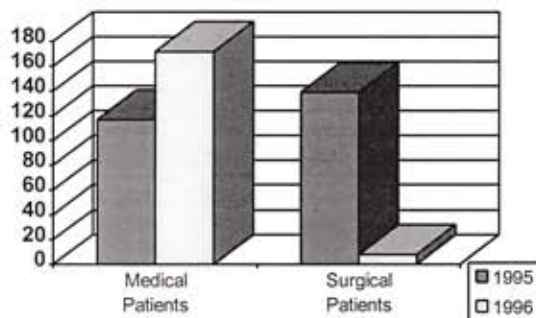
Treatment Program: In an attempt to prevent patients from pressure sores, hydrocolloids and the *Elasto-Gel*TM horseshoe shaped dressings were evaluated over a two year period (1995 - 1996). 9,419 *medical* patients and 9,562 *surgical* patients in the Red Cross Hospital, The Netherlands were reviewed for this study. All patients were evaluated for the risk of developing pressure ulcers on admission. All patients that were determined to be a high risk were preventatively treated on a special poly-urethane (Waterlily[®]) mattress (SG 45, Top SG-50).

In 1995, 143 hydrocolloid dressings were used to protect 107 high risk *medical* patients from pressure ulcers. In the same year, 430 hydrocolloid dressings were used to protect 145 high risk *surgical* patients from pressure ulcers.

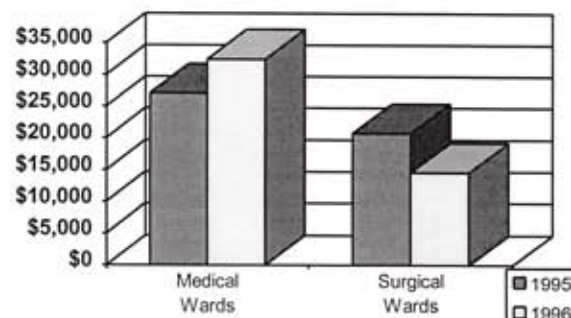
In 1996, 184 hydrocolloid dressings were used to protect 139 high risk *medical* patients. In the same year, 72 *Elasto-Gel*TM Horseshoe Shaped Dressings were used to protect the sacrum of 105 high risk *surgical* patients. All of these patients were on the operating table for more than one hour.

	Number of Patients	Number of Pressure Sores	Number of Dressings Used	Total Costs in US \$
Medical Patients 1995	4696	117 or 2.50%	143 hydrocolloids	\$ 27,070
Surgical Patients 1995	4692	139 or 3.00%	430 hydrocolloids	\$ 20,746
Medical Patients 1996	4723	172 or 3.60%	184 hydrocolloids	\$ 32,443
Surgical Patients 1996	4870	8 or 0.16%	72 <i>Elasto-Gel</i> TM	\$ 14,572

Two horseshoe shaped dressings could be cut out of one *Elasto-Gel*TM dressing. Total of 105 horseshoe shaped dressings were used.



Number of Pressure Ulcers



Total Costs in US \$

Results: In 1995, out of 4,696 *medical* patients, 117 developed pressure ulcers (2.5%) compared to 139 *surgical* patients who developed pressure ulcers, out of 4,692 (3.0%). In 1996, there were 139 high risk *medical* patients. But at the end of 1996, 172 *medical* patients developed pressure sores. Out of 4,723 *medical* patients 172 developed pressure ulcers (3.65%) compared to 8 *surgical* patients who developed pressure ulcers, out of 4,870 (0.16%). This data shows the *Elasto-Gel*TM to be statistical significant better at preventing ulcer formation compared to hydrocolloids with a $p < 0.001$.

The total cost for the treatment of *medical* patients from pressure sores in 1995 was \$27,070 and increased in 1996 to \$32,443. In comparison, the total cost for the treatment of surgical patients decreased from \$20,746 in 1995 to \$14,572 in 1996.

Conclusion: The dramatic reduction in the number of pressure ulcers and the cost is attributed to the use of the horseshoe shaped *Elasto-Gel*TM dressing on the operating room table as a protective device to prevent the formation of these ulcers. With the cost of the dressings at approximate \$2,700 and a cost reduction of approximately \$6,174 makes this a very cost effective treatment program.