THE TREATMENT OF MIXED SUPERFICIAL AND DEEP DERMAL FACIAL BURNS OF ADULTS USING THE HYDROLYTIC EPITHELIAL SUBSTITUTE SUPRATHEL™ (096)

*Rapp M.¹, Junghardt K.¹, Liener U. C.¹

¹ Marienhospital Stuttgart, Department for Orthopaedic, Trauma and Reconstructive Surgery, Burn Center, Stuttgart, Germany

Question: Numerous mixed superficial and deep dermal facial burns can be treated with the hydrolytic epithelial substitute SuprathelTM without considerably scars or functional limitations even if the wounds seem critical initially.

Methods: From January 2004 to December 2010 365 severe burned victims were treated and evaluated retrospectively.

Group I: 196 patients with facial burns: 145 men, 51 women, mean age 42.7 years, mean TBSA 20.9 %, mean ABSI 6.2; 48 patients with inhalation injury, from that 26 patients died.

Group II: 169 patients without facial burns: 117 men, 52 women; mean age 44.4 years, mean TBSA 13.1 %, mean ABSI 5.5; 13 patients with inhalation injury, from that 5 patients died.

Results: A total of 153 patients from these 196 patients with facial burns were treated solely with SuprathelTM. After necrectomy facial burns were covered in 8 patients primarily with split thickness skin grafts 2 to 3 weeks after trauma. In 1 case a mixed procedure with SuprathelTM and split thickness skin grafts was planed from the start. In 34 patients no therapy above-mentioned was carried out.

In 8 patients (5.2 %) treated primarily with SuprathelTM secondary skin grafting was needed. In 145 patients (94.8 %) facial burns healed completely after exclusive treatment with SuprathelTM.

Conclusion: The use of hydrolytic epithelial substitute SuprathelTM in the treatment of mixed superficial and deep dermal facial burns leads to good cosmetic and functional results and considerable simplification in the postoperative treatment. Because of SuprathelTM's membrane properties and polylactid mixture there is a quick and stable reepithelialization of facial burns.

Limitations in the treatment with Suprathel[™] will be found in extended full thickness burned areas. These facial burns still must be covered with split thickness skin grafts.