

Scientific Update 2023

- EBA 2023 -

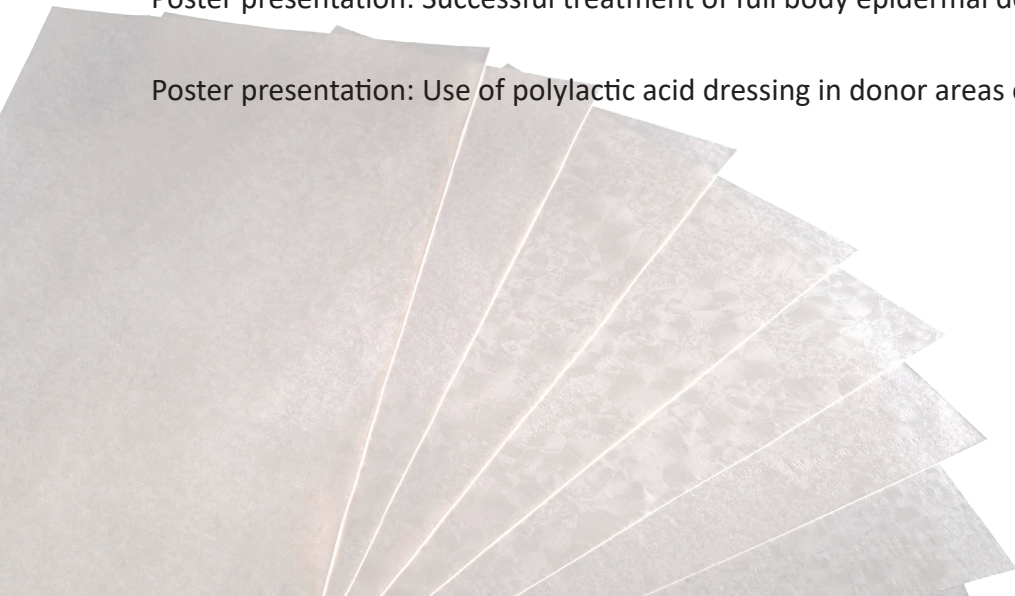
- » The beneficial use of SUPRATHEL®:
 - » In deep burn wounds after enzymatic debridement
 - » To lower the translation rate
 - » Even with later application
 - » In a young TEN Patient with a complex history
 - » On donor sites where re-harvesting was required
- » Good long-term outcomes with SUPRA SDRM® in deep skin defects

PMI Newsletter

THE TEMPORARY SECOND SKIN

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Oral presentation

Suprathel after enzymatic debridement with bromelain: our experience

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Enzymatic debridement (ED) has proven to be a reliable method for the highly selective removal of necrotic tissue. Following this tissue-preserving procedure, the wound covering should be selected with extreme care. Several publications have described SUPRATHEL® as the optimal wound covering after this kind of debridement. Dr. Diaz Ros from Valencia also reported the use of SUPRATHEL® on 32 sites in deep burns previously debrided with bromelain in his burn unit, proving:

- High rates of spontaneous re-epithelization
- Minimum local infection rate
- Reduces need for surgical intervention
- Shortened hospital stay
- Decreases complications
- Optimal functional and aesthetic short-term and long-term results.

He concludes:

“Suprathel is a suitable skin substitute for deep burn beds after enzymatic debridement with bromelain, achieving optimal functional and aesthetic results.”

Oral presentation

Synthetic epidermal substitute in the treatment of partial thickness burns in paediatric patients: a 3-year experience of a tertiary centre

Fernandes S¹, Carmo L¹, Teixeira I¹, Campos M¹, Garcia M¹

¹ Department of Pediatric Surgery, Centro Hospitalar Universitário De São João, Porto, Portugal

Among children admitted to Dr. Fernandes's burn unit, 120 of the pediatric patients received SUPRATHEL® treatment from November 2019 to November 2022. SUPRATHEL® was applied at a median of 4 days post-burn (IQR 2–6).

The results of this cohort can be summarized as follows:

- Short median healing time of 10 days (IQR 8–14)
- No correlation of healing time and the timing of SUPRATHEL® application
 - » Later application of SUPRATHEL® might still be beneficial.

Comparison of this „Suprathel® cohort“ with a historical cohort of 75 patients (with similar demographic and clinical characteristics) showed

- grafting rate was significantly lower in SUPRATHEL® patients (1,6% vs 17,3%; p<0.001).

Historical		SUPRATHEL®
2013-2014		2019-2022
n=75 (133)		n=122
Male 56.4%**		Male 59.8%**
Female 43.6%**		Female 40.2%**
Age (mdn) 3 y*	<div> <div></div> <div>** p=0.06</div> <div>*P=0.1</div> </div>	Age (mdn) 1.8 y*
Autologous skin graft rate		
17.2%	p=0.001	1.6%

Oral presentation

Long-term outcome after treatment of deep dermal to totally dermal burns with a polylactide-based matrix (SUPRA SDRM®) as dermal skin substitute with two-sided split skin coverage

Dr. Rapp M¹, Schappacher R¹, Liener U¹

¹ Marienhospital Stuttgart, Stuttgart, Germany

Our company's "newest Product" **SUPRA SDRM®** is a purely synthetic, degradable, polylactide-based matrix with a bimodal structure. Dr Rapp, one of our first users of **SUPRA SDRM®** describes his experience and results of a case series study. In 11 patients (mean age 62.7 y., 18% TBSA, ABSI 8) **SUPRA SDRM®** was applied on 22 sites after deep dermal & epifascial necrectomy or decortication on 5 different wound beds. (fat, fascia, muscle, tendon, bone). These are his findings:

- Split-thickness skin grafting could be performed after mean of 14.4 days
- Extensive healing of split-thickness skin grafts with good displacement
- No or little hypertrophic scarring or scar keloids
- No significant shrinkage of scars
- Good functional, mechanical, and aesthetic results in terms of long-term outcomes.

He concludes his observations as follows:

"Progressive vascularization of SUPRA SDRM® with increasing cell migration results in matrix remodeling with formation of dermal granulation tissue, which can be covered with split thickness skin grafts in a two-step procedure."

Poster presentation

Successful treatment of full body epidermal detachment in toxic epidermic necrolysis in a child using Suprathel®

Fernandes S¹, Barbosa-Sequeira J¹, Aquino C1, Campos M¹, Garcia M¹

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Dr. Frenandes from Portugal described the management of a TEN Case of an 11-year-old girl with a history of Crohn's disease and Autoimmune hepatitis, that was recently being treated with beta-lactam antibiotics because of streptococcal tonsillitis. An initially erythematous rash on the trunk and extremities progressed to epidermal loss of >90% TBSA. **SUPRATHEL®** was applied to all areas of epithelial loss except the perianal area and genitalia.

- Full epithelization was observed 7 days after **SUPRATHEL®** application
 - The neo-epidermis was progressively exposed days later to prevent new lesions
 - No organ system dysfunction or complication
 - Stabilization of all TEN manifestations
 - Reduction of pain along with positive feedback from patients.
- » “Suprathel® is a synthetic skin substitute that in this case allowed for fast healing and recovery in a severe case of TEN”



Day 13
Debridement and SUPRATHEL® Application



Day 21
Dressing revision – full epithelization
of all areas



Follow-up after 5 month
good long-term results

Poster presentation

Use of polylactic acid dressing in donor areas of skin graft patients with severe burns to improve their recovery

Guerrero Montes J¹, Vélez Palafox M¹, Rivera Sánchez R¹, Chávez Flores O¹, Tamez Pedroza L¹

¹ Instituto Nacional De Rehabilitación, Ciudad de Mexico, Mexico

Dr. Guerrero Montes showed the case of a 38-year-old female patient with extensive burns (TBSA 60%) who required multiple surgeries in which tangential excisions were performed and skin grafts were harvested and applied. Donor sites were rare. Thus, skin grafts were harvested from scalp. The donor site was covered with **SUPRA**THEL®, which resulted in the following benefits:

- Improved process of epithelialization of the skin donor area
- Partial epithelialization of scalp skin at 3 days (Figure 2)
- Complete epithelialization at 7 day (Figure 3)
 - » allowing repeated harvesting of grafts from the same donor area.



Day 0



Day 3



Day 7

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