



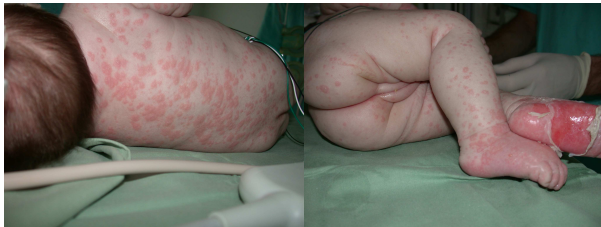
USE OF SUPRATHEL® IN TWO PAEDIATRIC PATIENTS WITH TOXIC EPIDERMAL NECROLYSIS (TEN).

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Toxic epidermal necrolysis (TEN) is a severe cutaneous reaction carrying significant risks of morbidity and mortality. There are three stages of classification of the disease, with Stevens Johnson Syndrome (SJS) on one end and TEN on the other end of the spectrum. SJS includes cases with mucosal erosions and widespread purpuric macules with epidermal detachment up to 10% of total body surface area (TBSA); transitional SJS – TEN represents epidermal detachment between 10% and 30% and TEN shows skin detachment of more than 30% of TBSA.

We report the cases of two children, a three months old baby and a seven year old girl, both with a history of viral infection, who presented with rapidly expanding erythematous and vesiculo-bullous skin eruptions and epidermal detachment. The girls were transferred to our children's burns unit, where fluid and electrolyte therapy was carried out according to our standard resuscitation protocol for burns, and Suprathel® (PolyMedics Innovations GmbH, Filderstadt, Germany) and fatty-gauze as topical wound dressings were applied in form of a whole body cover.

CASE 1



3 months old baby with rapidly progredient maculo-papulo-vesicular erythema on the hands, feet and trunk with > 30% TBSA affected. Bullous desquamation appeared on hand and soles.



„Whole body bandages“ with SUPRATHEL® and fatty gauze



8 weeks after disease onset

CASE 2



7 ½ years old girl with hemorrhagic stomatitis and progredient vesico-bullous exanthema on the whole body with blister formation.



after 3 weeks

Reference	GA	Diagnosis	age at disease / erythema onset	Infectious agent	Outcome after erythema onset
2005 Lohmeier K.	27 weeks	VLBW, IRDS, Perforation, Sepsis	9 days / 3 weeks 3 days	Coag neg Staph	Death 1 week
1994 Picard E.	term	CF, Pneumonia, Ileus, sepsis	3 months / 4 months	Klebsiella pneu	Death 2 days
1992 Scully MC.	term	Urosepsis, perinephric abscess, DIC	2 weeks / 7 weeks	E. coli	Death 1 week
1985 Hawk RJ.	term	Pulmonary valve dysplasia, Goretex shunt, sepsis, DIC	3 weeks / 5 weeks 5 days	Klebsiella pneu	Death 2 days
1984 de Groot R.	26 weeks	VLBW, PDA, IRDS, septicaemia, shock	1 day / 5 weeks	Klebsiella pneu	Death 3 days

Fatal cases of TEN in (preterm) newborns and small infants described in the literature. GA= Gestational Age, VLBW= very low birth weight, IRDS= infant respiratory distress syndrome, CF= cystic fibrosis, DIC= disseminated intravascular coagulation, PDA= persistent ductus arteriosus

CONCLUSION

- In our cases Suprathel® has been successfully used for the first time in a baby and a young girl with excessive dermal detachment by TEN.
- The wound re-epithelisation was accelerated compared to data in literature;
- The elastic-plastic properties of Suprathel® facilitated easy application on all surfaces.
- Only a single wound covering was required with no need for dressing changes and therefore reduced wound pain.
- The bulky dressing covering the whole body, made the handling and the maintenance of asepsis, especially for the nurses, very easy and also prevented fluid and heat loss through the wounds.