

# Treatment with specially manufactured silk clothes (DermaSilk®) in children with atopic dermatitis

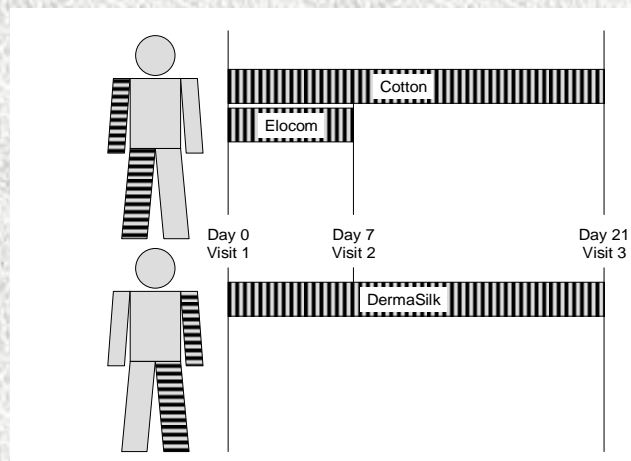
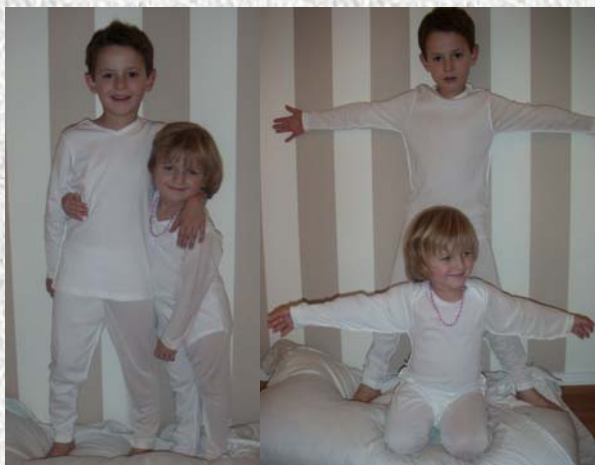


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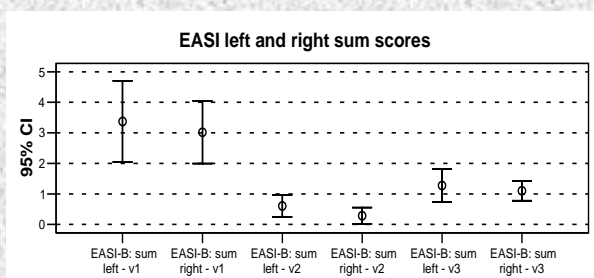
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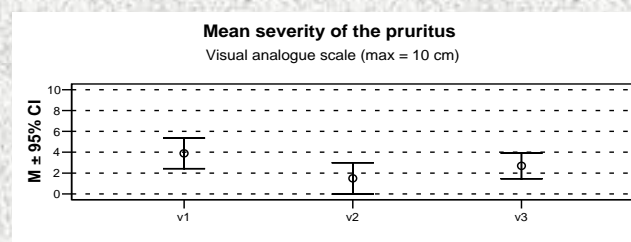
## Methods:

The trial design was an open non-randomized study, with left-right intra-patient comparison. Fifteen children (age between 0.6 and 9.2 years) were included in the study. The study device was a silk fabric coated with AEGIS AEM 5772/5 (DermaSilk®) fashioned either as romper suit or as a T-shirt or pantyhose and worn over a period of 4 weeks (control side was composed of cotton). On the control side the class III corticosteroid momethason (Elocom Crème®) was applied once daily between baseline and visit 2 (7days). The Excipial Fatty Cream® was used as basis treatment throughout the study. For the side comparison (left-right) between DermaSilk® and the conventional corticosteroid therapy a modified EASI score was used. In addition, the overall severity of the disease was evaluated using a Visual Analogue Scale (VAS) for the pruritus. All patients were evaluated at baseline and 7 & 21 days after the initial examination.



## Background:

In children with atopic dermatitis (AD), eczema is easily aggravated by contact with irritant factors (e.g. aggressive detergents, synthetic and woolen clothes). Also skin colonization with *Staphylococcus aureus* is known to play a major triggering role. The objectives of this phase I/II clinical trial was to evaluate the safety/tolerability and the effect of specially manufactured Silk clothes (DermaSilk®) in children with moderately severe AD compared to conventional topical corticosteroid therapy.



## Results:

Both the left side treated with DermaSilk® and the right side treated with cotton and Elocom Crème® showed a significant reduction of the Eczema Area and Severity Index (EASI) after 7 days ( $p < 0.01$ ). In correlation to the EASI, also the patient evaluation of pruritus and the global evaluation by the investigator showed a significant improvement within 7 days. Overall both treated sides showed a highly significant reduction of EASI by  $6.6 \pm 6.7$  ( $p < 0.01$ ) between baseline visit and the final visit after 21 days. At no time point a significant difference between DermaSilk® and treatment with cotton and the topical corticosteroid could be observed.

## Conclusion:

Use of silk fabrics with an antimicrobial finish proved surprisingly effective in the treatment of childhood AD and was comparable to the efficacy of a modern topical corticosteroid in combination with cotton clothing.