

Antimicrobial Silk Clothing in the Treatment of Atopic Dermatitis Proves Comparable to Topical Corticosteroid Treatment

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“Antimicrobial Silk Clothing in the Treatment of Atopic Dermatitis Proves Comparable to Topical Corticosteroid Treatment”
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OBJECTIVE

This study compared the efficacy of an antimicrobial silk fabric (DermaSilk®) with that of topical corticosteroid in the treatment of AD.

METHOD

Fifteen children were enrolled and wore a dress, where the left side was made of DermaSilk and the right side was made of cotton. The right arm and leg were treated daily with the corticosteroid mometasone for 7 days. The treatment efficacy was measured with a modified EASI (Eczema Area and Severity Index) and with an assessment by the patients/parents and by a physician. All patients were evaluated at baseline, as well as 7 and 21 days after the initial examination.



Fig. 1. Clothes tailored for intra-individual left versus right comparison. Smaller children wore a romper and pantyhose (a), while older children wore a combination of a T-shirt and pantyhose (b). The left arm and leg were made of DermaSilk. The right arm and leg as well as the part covering the torso were made of cotton.

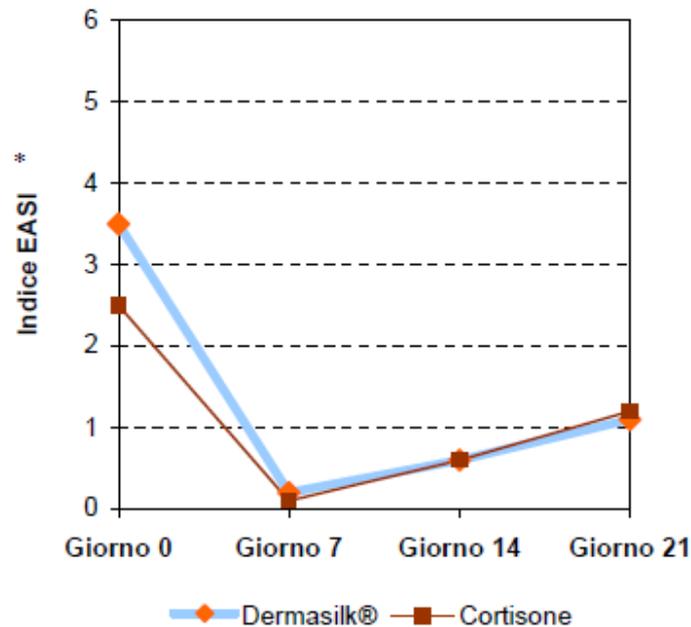
Mometasone, a potent topical corticosteroid was applied to the cotton covered limbs once daily for the first 7 days and an identical base emollient with no active steroid component was applied to both sides for the full duration of the study.

The results were studied using a modified eczema severity (EASI) score and a Visual Analogue Score (VAS) was adopted for measuring pruritus.

RESULTS

Readings were measured at day 7 and day 21.

They showed no significant difference between the two sides in either EASI or the patient evaluation of the symptoms. This is surprising since the DermaSilk performed as well as an actively used potent steroid cream over the first 7 days of the study and remained as effective during the following 14 days when no steroid was applied. There was no evidence that the cream applied to the cotton covered limbs had any effect on the DermaSilk limbs via the bloodstream.



CONCLUSION

The authors concluded that **the efficacy of DermaSilk was comparable in efficacy to a group III topical steroid** and was as good as the current standard care in atopic dermatitis. They considered the use of DermaSilk to be a therapeutic approach in atopic dermatitis and suggested that it **might become a well accepted therapeutic alternative to treatment with corticosteroids, especially for those children whose parents are reluctant to apply topical corticosteroids.**