EFFICACY AND TOLERANCE OF DERMOCOSMETIC GEL-CREAM COMBINED AND IN RELAY WITH TOPICAL CORTICOSTEROIDS TREATMENT IN ATOPIC DERMATITIS CHILDREN

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INTRODUCTION

Atopic dermatitis (AD) is a chronic inflammatory skin condition that alternates between flare-ups and remission and whose prevalence is increasing globally in industrialized countries. In addition to causing significant itching and pain, it also impairs the patient's quality of life [1]. Flare-ups are more frequent in winter but do not only occur in that season [2,3], as they also occur during summer [4]. Emollients are considered to be the first-line treatment for AD as their use can reduce the severity of symptoms like skin dryness, but also potentially flare-ups, the need of corticosteroids, and thus improving patients' quality of life [1]. In many regions with hot and humid climates, compliance is reduced for this crucial component of treatment, due to the cosmeceutical formulation of most emollients which are usually cream or balms with rich texture. Therefore, we developed AD-specific dermocosmetic product with a gel-cream texture to provide a suitable response to atopic skin and can be used all year round, including in hot and humid weather.

OBJECTIVES

The aim of this study was to evaluate the efficacy, tolerance, and impact on quality of life of an AD-specific dermo-cosmetic product with a gel-cream texture in different Latin American countries with hot and humid climates.

MATERIALS & METHODS

An open, multicentre study was performed involving five visits (D-15 or D-7, D0, D28, D56, and D84 ±2 days). It was carried out in Argentina, Colombia, and Peru from August 2021 to March 2022. 56 subjects aged 6 months to 12 years (mean age of 5.3 years) were included with a diagnosis of mild to moderate AD. At the time of inclusion, the children had to be suffering from an AD flare-up requiring treatment with topical corticosteroids. The study product was applied twice daily on the face and body together with topical corticosteroid treatment (D-15 or D-7). and then since D0 in relay to treatment for 3 months. At each visit, SCORAD, skin dryness (4-point scale), pruritus (11-point Numerical Rating Scale), sleep quality, quality of life (Infant Dermatitis Quality of Life (IDQoL) questionnaire for children from 6 months to 4 years), and tolerance were assessed. The number of relapses and their duration were recorded on D28, D56, and D84. At the last visit (D84), the global efficacy (5point scale) and subjective efficacy (4-point scale) were assessed for all included children.

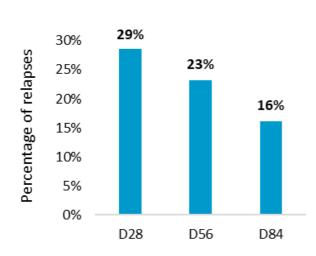
RESULTS

On D0, the SCORAD was significantly reduced by 62% compared to D-15 after period of topical corticosteroid application in combination with the product. The mean SCORAD score decreased significantly by 28%, 41%, and 52% on D28, D56, and D84, respectively (see Graph 1).

25.00 Mean score 15.00 10.00 20.00 -62% 10.63 -41% -52% 7.64 6.29 5.09 0.00

Graph 1: Evolution of the mean SCORAD (***p<0.001; **p<0.01, Wilcoxon Test)

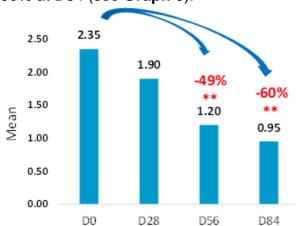
Relapses decreased by 29%, 23%, and 16% on D28, D56, and D84, respectively (see Graph 2).



Graph 2: Evolution of percentage of relapses

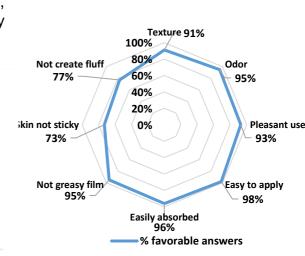
On D84, skin dryness was reduced by 56%, roughness by 69%, itching by 52%, and flaking by 78%. The product was very well tolerated during the study by all participants.

With regard to the subjects' quality of life, the average IDQoL score decreased by 60% at D84 (see Graph 3).



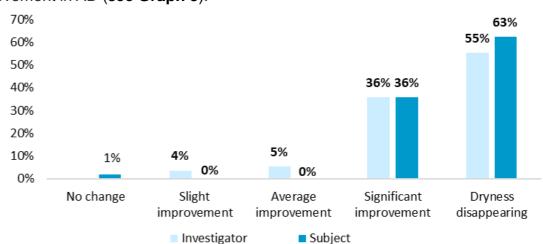
Graph 3: Evolution of the IDQoL score (**p<0.01, Wilcoxon test)

The dermo-cosmetic gel-cream was well appreciated on the subjective efficacy assessment (see Graph 4).



Graph 4: : Cosmetic properties of the dermocosmetic gel-cream by the subjects at D84

The impact of pruritus on sleep improved for 90% of the subjects with a number of nocturnal awakenings reduced by 73% on D84 compared to D0. With regard to global efficacy, 99% of subjects and 91% of investigators reported a significant improvement in AD (see Graph 5).



Graph 5: Global efficacy of the dermo-cosmetic gel-cream at D84

CONCLUSION

The gel-cream texture is well adapted under Latin America climate and by extension during summer in temperate climate. This dermo-cosmetic gel-cream is very well tolerate and can be used in combination and in relay with topical corticosteroids treatment to reduce relapse, and improve clinical signs and quality of life in children suffering from AD.

References

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