TOLERANCE AND EFFICACY OF A DERMOCOSMETIC APPLIED FOR FOUR WEEKS IN SUBJECTS WITH EYELID ECZEMA

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INTRODUCTION

Eyelid eczema (EE) is common and difficult to treat. The skin around our eyes is delicate and prone to eczema, making it a common struggle for many of us. Because of the variety of clinical appearance, the differential diagnostic considerations are often difficult.[1-3]

Its aetiology is still poorly investigated. Allergens commonly triggering eyelid dermatitis comprised fragrances, metals, neomycin, oleamidopropyl dimethylamine, tosylamide formaldehyde resin, benzalkonium chloride, and other preservatives.[4]

The tested dermocosmetic (DC) has been specifically developed to restore the skin barrier of the periocular region and to provide relief from signs and symptoms related to eczema. It contains Niacinamide, fractions of the probiotic Sphingobioma and Neurosensine, a soothing compound that acts on skin sensitivity in decreasing erythema, irritation and pruritus, all frequently observed in periorbital eczema.[5, 6]

This study assessed the tolerance and efficacy of a DC in subjects with eyelid eczema.

MATERIAL & METHODS

This was an open-label study conducted under ophthalmological and dermatological control in adult subjects with EE ground (blepharitis, epiphora, chronic whimpering/watery eyes) and sensitive skin. The DC was to be applied twice daily for 28 days.

Dermatological signs and symptoms on the periorbital region and ophthalmological signs and symptoms as well as tear film break-up time and colorimetric examination of the cornea and conjunctiva were assessed at Day 0, 14 and 28, 10 minutes after application. Subjects' quality of life (QoL) was assessed using DLQI, and the efficacy and cosmetic acceptability of the DC was self-assessed by patients.

RESULTS

Overall, 41 subjects were included; 59% were women. The mean age was 52.4±15.8 years old, all subjects had periorbital sensitive skin. A total of 37% of the subjects had mixed, 34% dry and 29% normal peri-orbital skin.

The DC had an immediate effect (10 minutes after the 1st application) in reducing the intensity of itching, prickling, burning sensation and tightness scores with an average decrease of 1 point on a 5-point scale. Clinical signs (desquamation/dryness, eczema, erythema, palpebral swelling, roughness, Figure 1) as evaluated by dermatologists, and symptoms (itching, prickling, heat/burning sensation, tightness, Figure 2) by subjects, had all significantly ($p<0.05$) improved by Day 14 and were sustained to Day 28.

At Day 28, the percentage of subjects having desquamation at Day 0 had decreased to only 46% of the population, same with eczema to 18%, with erythema to 51%, with palpebral swelling to 59% and with roughness to 13%. In parallel, at Day 28, the percentage of subjects reporting itching at Day 0 had decreased to only 64% of the population, same with prickling to 26%, heat/burn sensation to 18% and tightness to 23%.

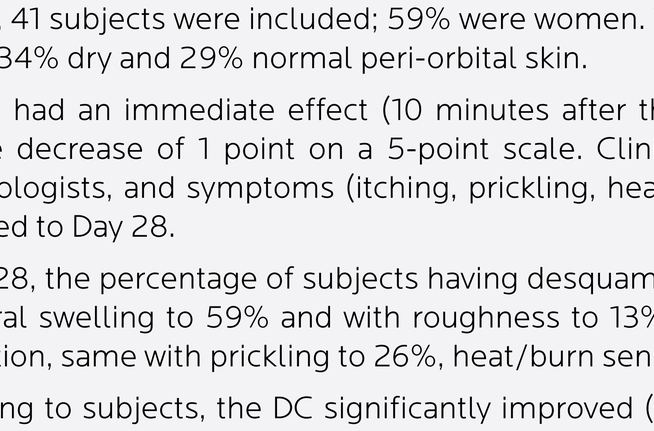
According to subjects, the DC significantly improved ($p<0.001$) the perception of irritation (73%), swelling (66%) and an increased feeling of soothing of the periorbital area (59%) at Day 28 (Figure 3).

QOL evaluated using the DLQI had improved at Day 28 (0.82±1.0) compared to Day 0 (4.17±2.23).

No local adverse reactions considered related to the DC were reported. Ophthalmological examinations paralleled the excellent dermatological tolerance of the DC.

Figure 1

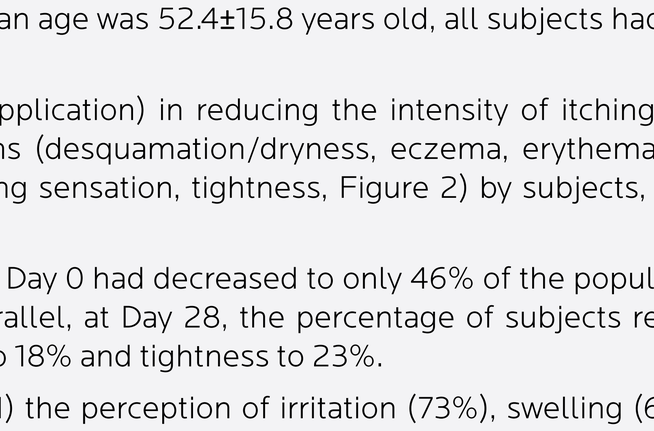
CLINICAL SIGNS AS ASSESSED BY THE DERMATOLOGISTS AT DAY 0, DAY 14 AND DAY 28



All clinical signs had significantly ($p<0.05$) improved after 14 days and 28 days of daily use.

Figure 2

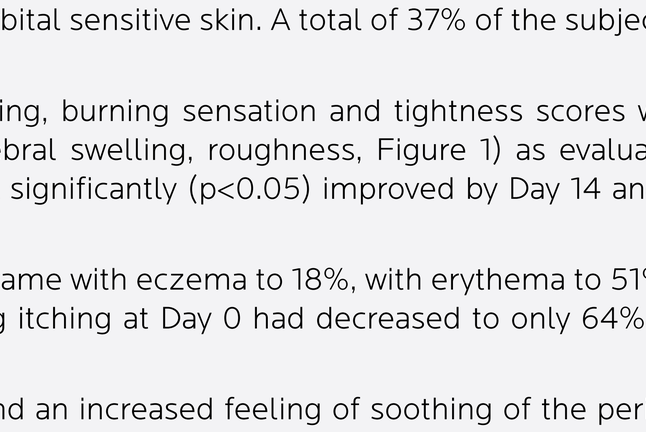
SUBJECT REPORTED SYMPTOMS AT DAY 0, DAY 14 AND DAY 28



All subject-reported symptoms of palpebral eczema had significantly ($p<0.05$) improved at Day 14 and Day 28 (T10).

Figure 3

PERCEPTION OF THE IRRITATED, SWELLING AND SOOTHED ASPECT OF THE EYE CONTOURS AT D0, D14 AND D28



Significant improvement ($p<0.0001$) for patients and dermatologists. Patients reported a significantly ($p<0.0001$) improved soothed eye contour.

CONCLUSION

The tested DC is highly beneficial in reducing clinical signs and symptoms of eyelid eczema. Quality of life had remarkably improved. The tolerance of the DC was excellent with no local and ophthalmological events being reported.

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