INTEREST OF A DERMO-COSMETIC PRODUCT IN THE MANAGEMENT OF IRRITANT AND ALLERGIC CONTACT EYELID DERMATITIS

Floriane Gayraud¹, Nathalie Ardiet¹, Marlène Chavagnac-Bonneville^{1,2}, Christelle Graizeau^{1,2} and Michèle Sayag¹

¹NAOS Group, Research and Development Department, Aix-en-Provence, France

²NAOS Institute of Life Science, Aix-en-Provence, France

INTRODUCTION & OBJECTIVES

Eyelid inflammation is mainly due to irritant and allergic contact dermatitis (50 to 76%). They are mostly characterized by dryness, erythema, edema and itching, that could impact their quality of life. The aim of this study is to evaluate the repairing and soothing effects, the impact on quality of life and the safety of a dermo-cosmetic product on irritant and allergic contact eyelid dermatitis.

MATERIALS & METHODS

Firstly, to evaluate the anti-redness effect, skin colour was measured on 22 healthy subjects using a spectrophotometer before/after application of patches containing the product with 1% SLS.

Secondly, an observational study was performed including 45 subjects affected by irritant or allergic contact eyelid dermatitis. They applied the product for 28 days twice daily. At day 0 (D0) and D28, the clinical repairing and soothing assessment were performed by the dermatologist using an 11-point scale. During the study, the subjects evaluated the subjective efficacy by using a four-point scale, and their quality of life by using the SKINDEX-16 questionnaire. The investigator also evaluated the tolerance.

RESULTS

SLS-induced redness was significantly reduced by 47% (p<0.001) with the product via the colorimetric parameter a*. In the clinical study, 44 subjects (90.9% women) with an average age of 41.9 years and a majority with irritant contact dermatitis (86.4%) were analyzed. The origin of the dermatitis (n=32) was mainly cosmetic (71.9%). On D28, the dermatologist assessed a significant improvement ranging from -88.0% to -100% in clinical signs related to repairing (**Fig. 1**) and soothing effects (**Fig. 2**).

Figure 1: Evaluation of the repairing effects between D0 and D28 (**p<0.01, ***p<0.001, Student test)

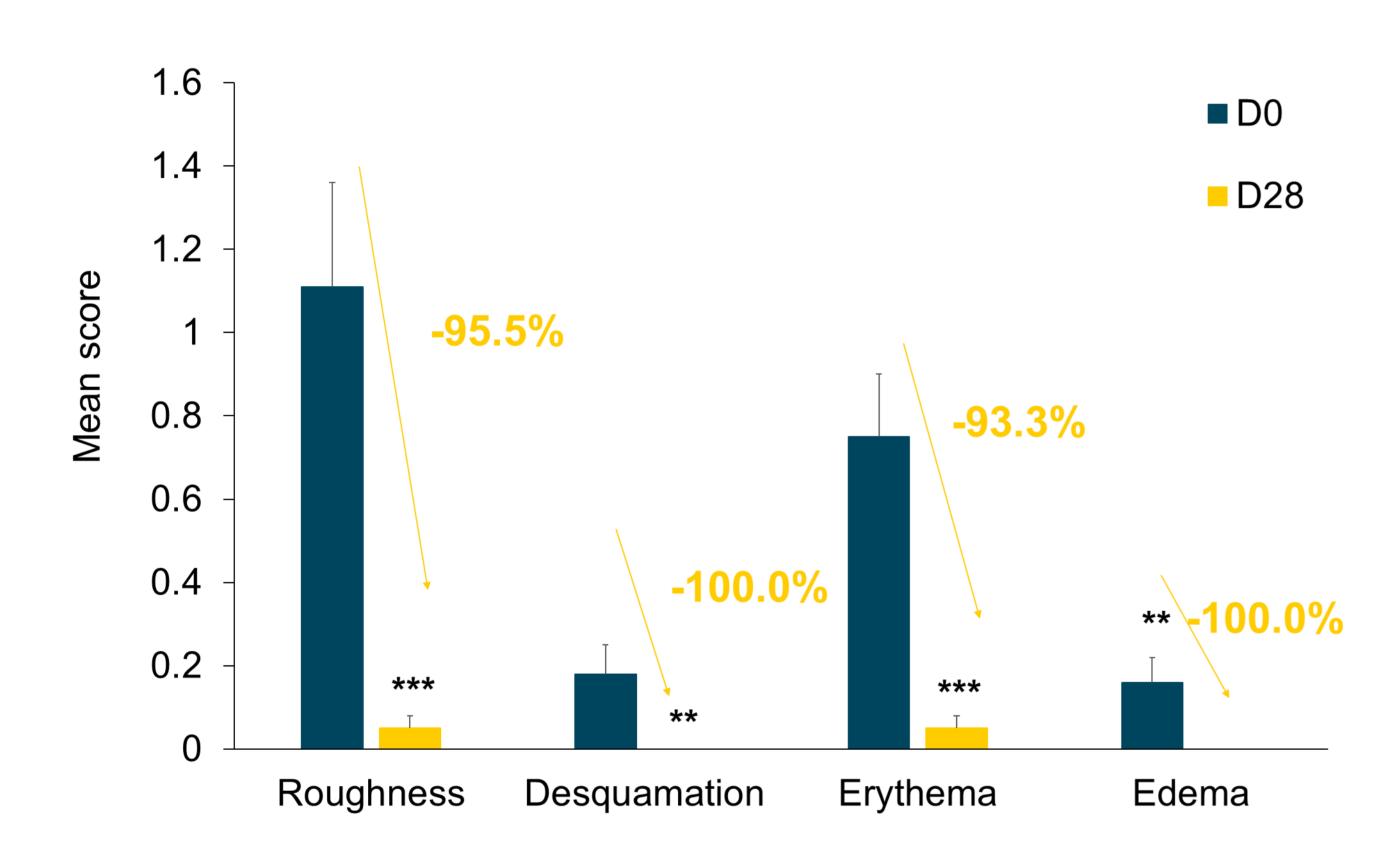


Figure 3: Evaluation of the subjects' quality of life on D0 and D28 with the SKINDEX-16 questionnaire on the symptoms, the emotions, the functional signs and the total score (***p<0.001, Student test)

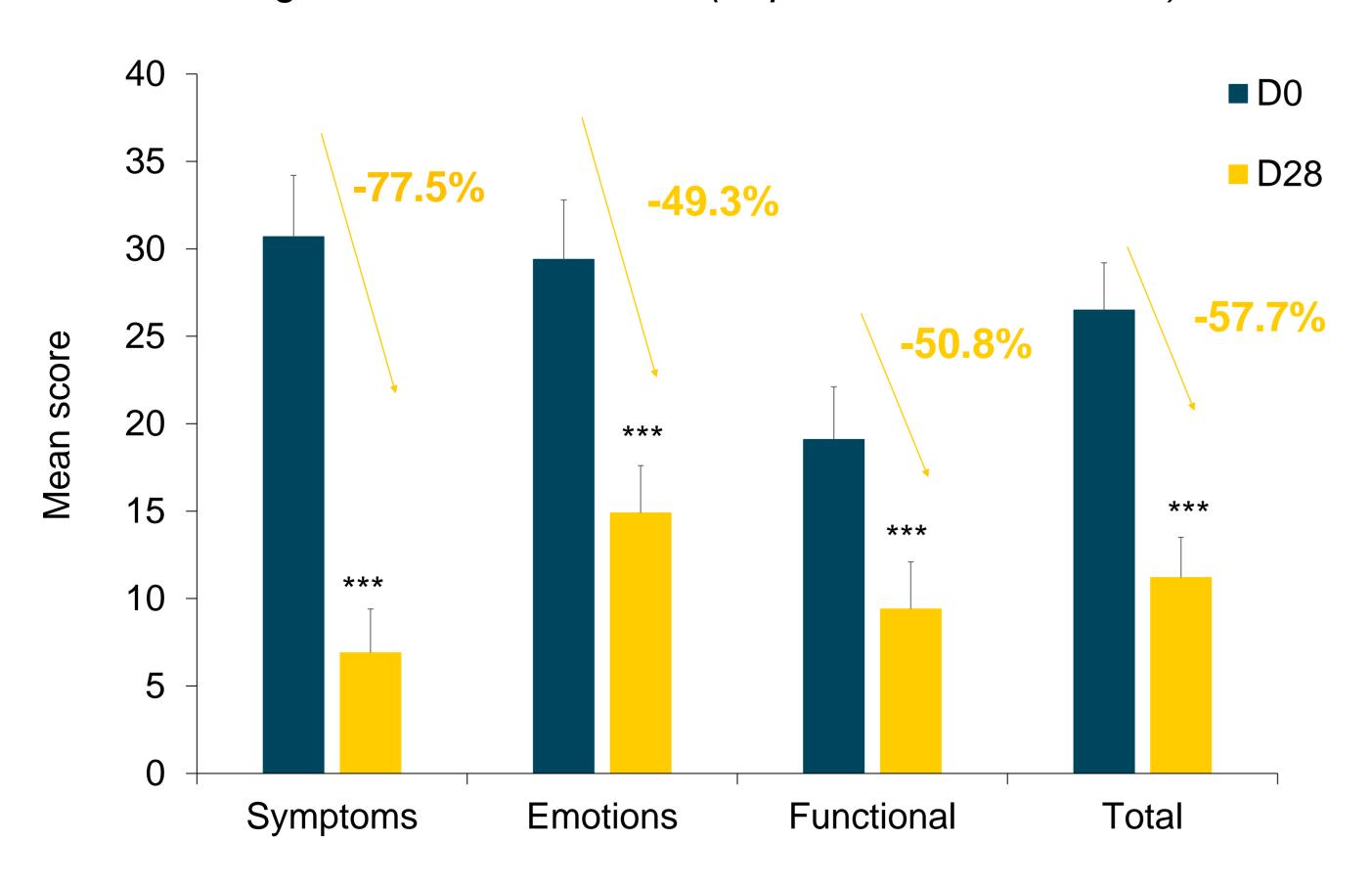
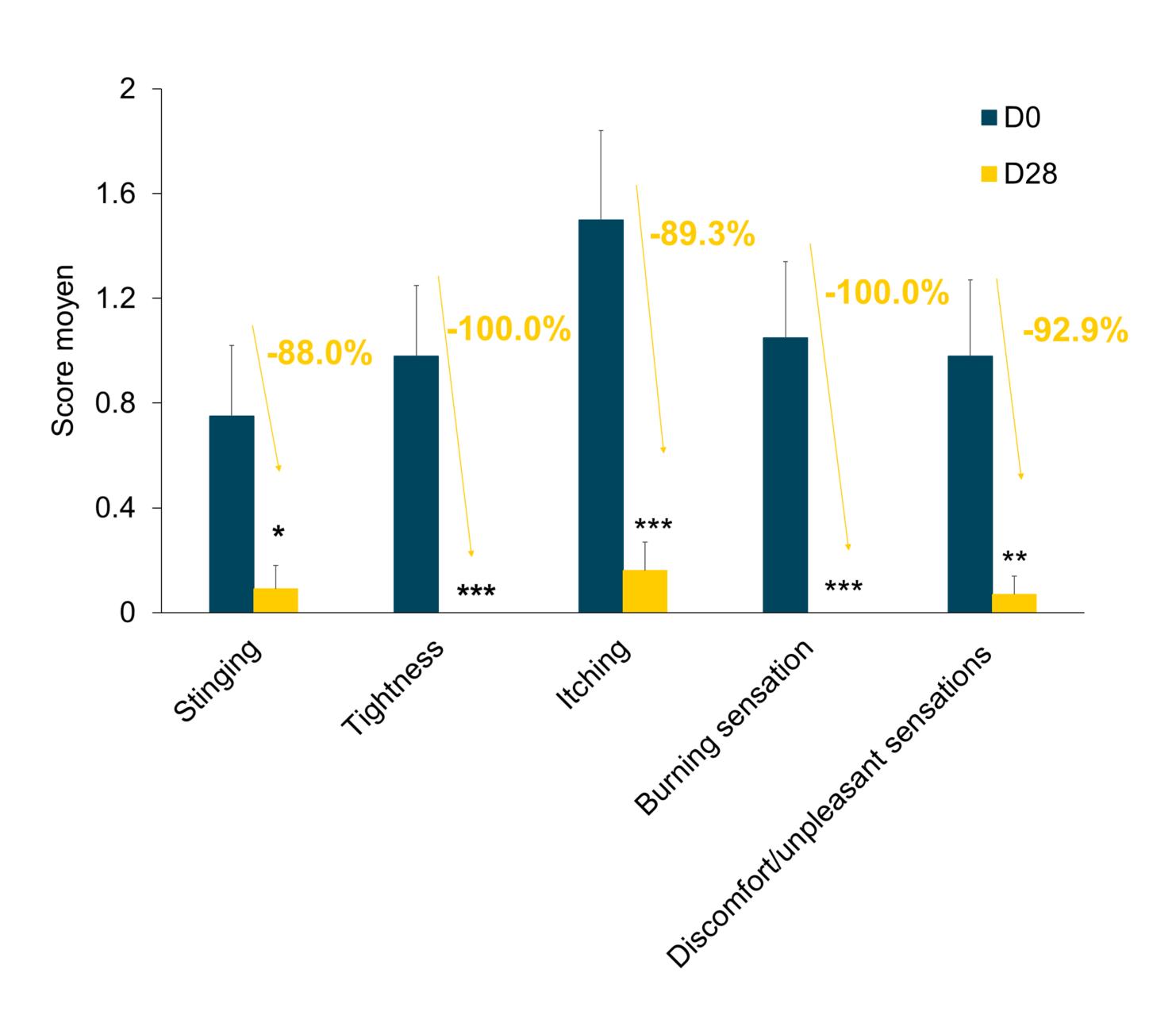


Figure 2: Evaluation of the soothing effects between D0 and D28 (**p<0.01, ***p<0.001, Student test)



In addition, for 81.8% to 97.7% of the subjects, the product is effective in many aspects: lastingly repairs and hydrates, cleans and removes make-up from irritated eyelids, and eyelids are more resistant to aggressions.

Their quality of life was significantly improved on D28 with a decrease of -57.7% in the SKINDEX-16 total score (Fig. 3).

After 28 days, the product was well tolerated.

CONCLUSION

This study demonstrated that this dermo-cosmetic product efficiently soothes, repairs and cleanses the eyelid skin of subjects affected by irritant or allergic contact dermatitis and is relevant in the management of this pathology.

