

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

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## Introduction

Irritant and allergic contact dermatitis are responsible for 50 to 76% of eyelid inflammation and can impact the patients' quality of life. The objective of this study is to evaluate the repairing and soothing effects, the impact on the quality of life and the safety of a dermo-cosmetic product on irritant and allergic contact dermatitis.

## Materials and methods

In order to assess the soothing effect, the skin color was measured on 22 healthy subjects (average age 42 years) using a spectrophotometer before and after application to the forearm of patches containing the product and 1% SLS after wearing for 18h then 6h after removing it. Then, an open observational study was performed including 45 subjects affected by repetitive history of either irritant or allergic contact dermatitis since less than 6 months. They applied the product for 28 days twice daily, the morning as a skin care, and the evening as a skin care or a make-up removal without rinsing. On D0 and D28, the dermatologist evaluated the repairing and soothing effects (scale from 0 to 10), and the subjects evaluated the subjective efficacy (four-point scale) and their quality of life (SKINDEX-16 questionnaire). The investigator reported any abnormal reaction linked to the product application.

## Results

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 included. The origin of the dermatitis ( $n=32$ ) was mainly cosmetic (71.9%). On D28, the dermatologist assessed a significant decrease ranging from -88.0% to -100% in clinical signs related to repairing (Fig. 1) and soothing effects (Fig. 2). 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 that 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.

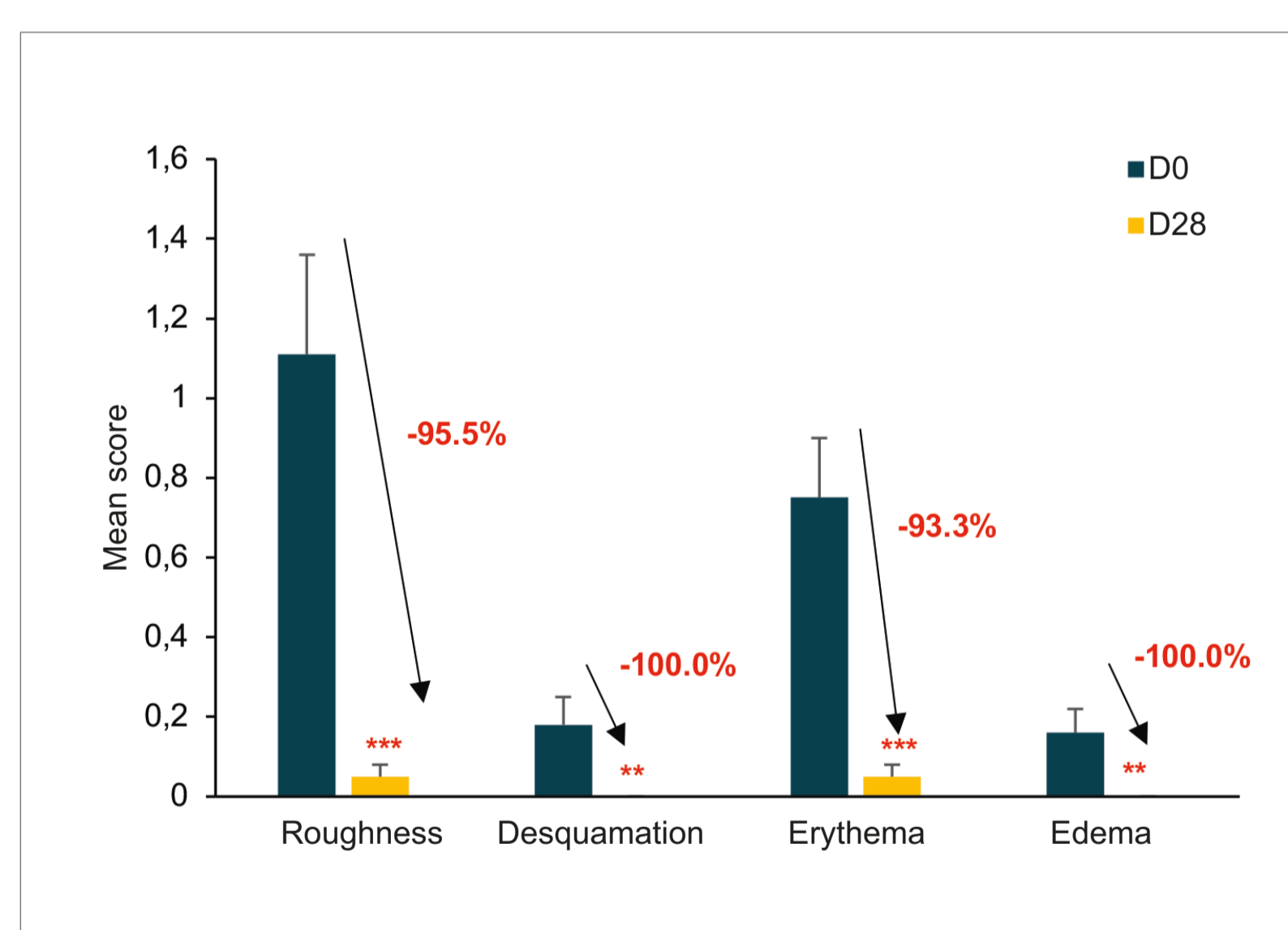


Figure 1. Evaluation of the repairing effects between D0 and D28 (\*\* $p < 0.01$ , \*\*\* $p < 0.001$ , Student test)

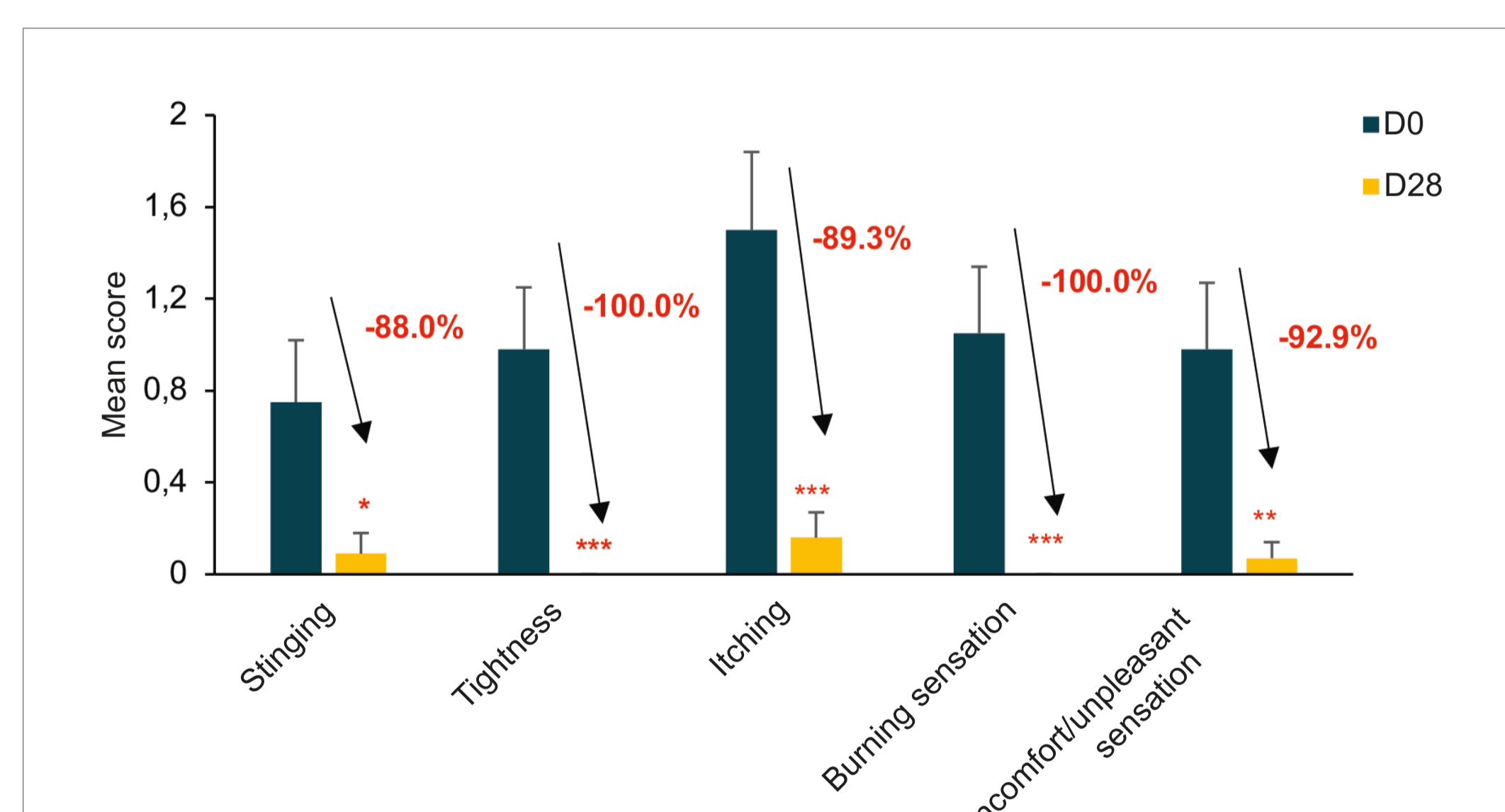


Figure 2. Evaluation of the soothing effects between D0 and D28 (\*\* $p < 0.01$ , \*\*\* $p < 0.001$ , Student test)

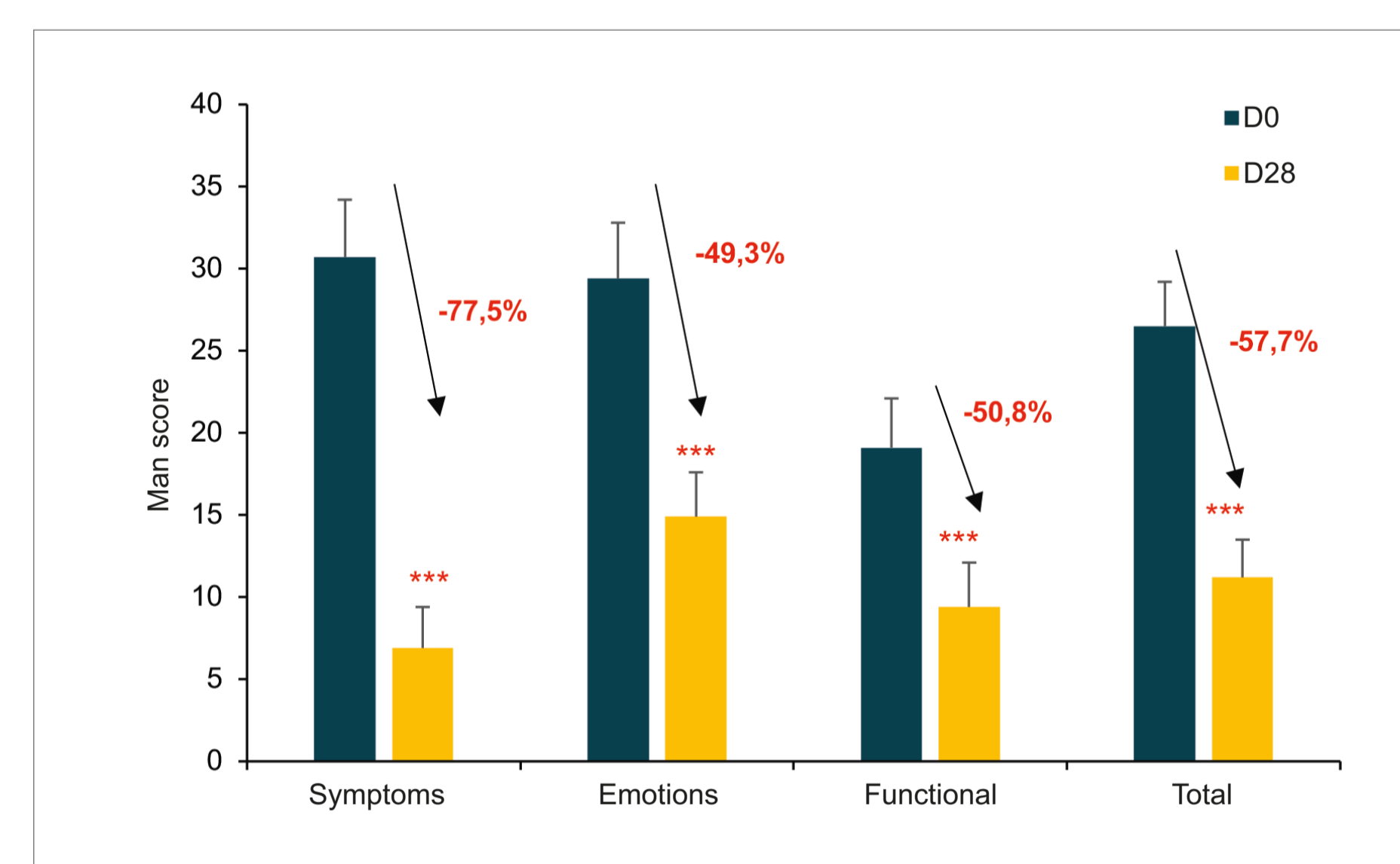


Figure 3. Evaluation of the subjects' quality of life on D0 and D28 with the SKINDEX-16 questionnaire on the symptoms, the emotions, the functional signs and the total score (\*\*\* $p < 0.001$ , Student test)

## Conclusion

This study demonstrated that this specific dermo-cosmetic product efficiently soothes, repairs and, cleanses the eyelid skin of irritant and allergic contact dermatitis subjects, improving their quality of life.

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