

INTEREST OF A SPECIFIC DERMO-COSMETIC PRODUCT IN THE MANAGEMENT OF DAMAGED HANDS WITH MICRO-FISSURES AND CRACKS

Bergera-Virassamynaïk S.¹, Come M.¹, Chavagnac-Bonneville M.^{1,2}, Polena H.¹, Graizeau C.^{1,2} and Sayag M.¹

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

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

INTRODUCTION & OBJECTIVES

Exposed to many environmental aggressions, hands' skin is frequently prone to irritant contact dermatitis, which increases the skin permeability and consequently fostering allergic contact dermatitis. Housewife's dermatitis is mainly caused by repeated exposure to water and synthetic detergents. It is characterized, especially for dry skin, by redness, scaling, itching and may progress until cracking skin, pain, secondary infections, and bleeding if treatment is delayed. Therefore, a skin care product is recommended by specialists, to hydrate and to relieve discomfort feelings. The objective of this study was to evaluate the clinical efficacy and safety of a specific dermo-cosmetic product on subjects presenting damaged hands with micro-fissures and cracks.

MATERIALS & METHODS

32 subjects with damaged hands with light to moderate cracks (induced by irritation and friction) and using solvents or corrosive products, were included in an observational, prospective, and non-comparative open study under dermatological control. They applied on their (clean and dry) hands for 28 days a specific dermo-cosmetic product at least twice a day and as often as necessary. The product contained active ingredients acting in the repairing process (hyaluronic acid, polyquaternium-51, hydroxyproline) associated with the tyrosyl-arginine dipeptide modulating the perception of skin discomfort feelings (irritation, heat, pain). At day 0 (D0), D7, D14 and D28, the dermatologist assessed on the hands the clinical physical signs (scaling, roughness, redness, cracks) and the functional signs (tightness, stinging, itching, burning) using a scale from 0 to 4. The repairing effect was also evaluated by measuring the Trans Epidermal Water Loss (TEWL) and the length of a crack in 2D by echography, and macrophotographs were taken in standardized conditions to visually assess the effect. Moreover, the subjective efficacy and cosmetic properties were evaluated at D28 by the subjects via a questionnaire. The investigator reported all possible abnormal reaction linked to the application of the product.

RESULTS

31 subjects completed the study (one missed the visit on D14). They were 41 years in average (20 to 68), 74% women, all with dry skin, mainly sensitive skin (97%) and phototype II (58%) or III (32%).

Figure 1: Clinical physical (a) and functional (b) signs were significantly decreased and visible (c).

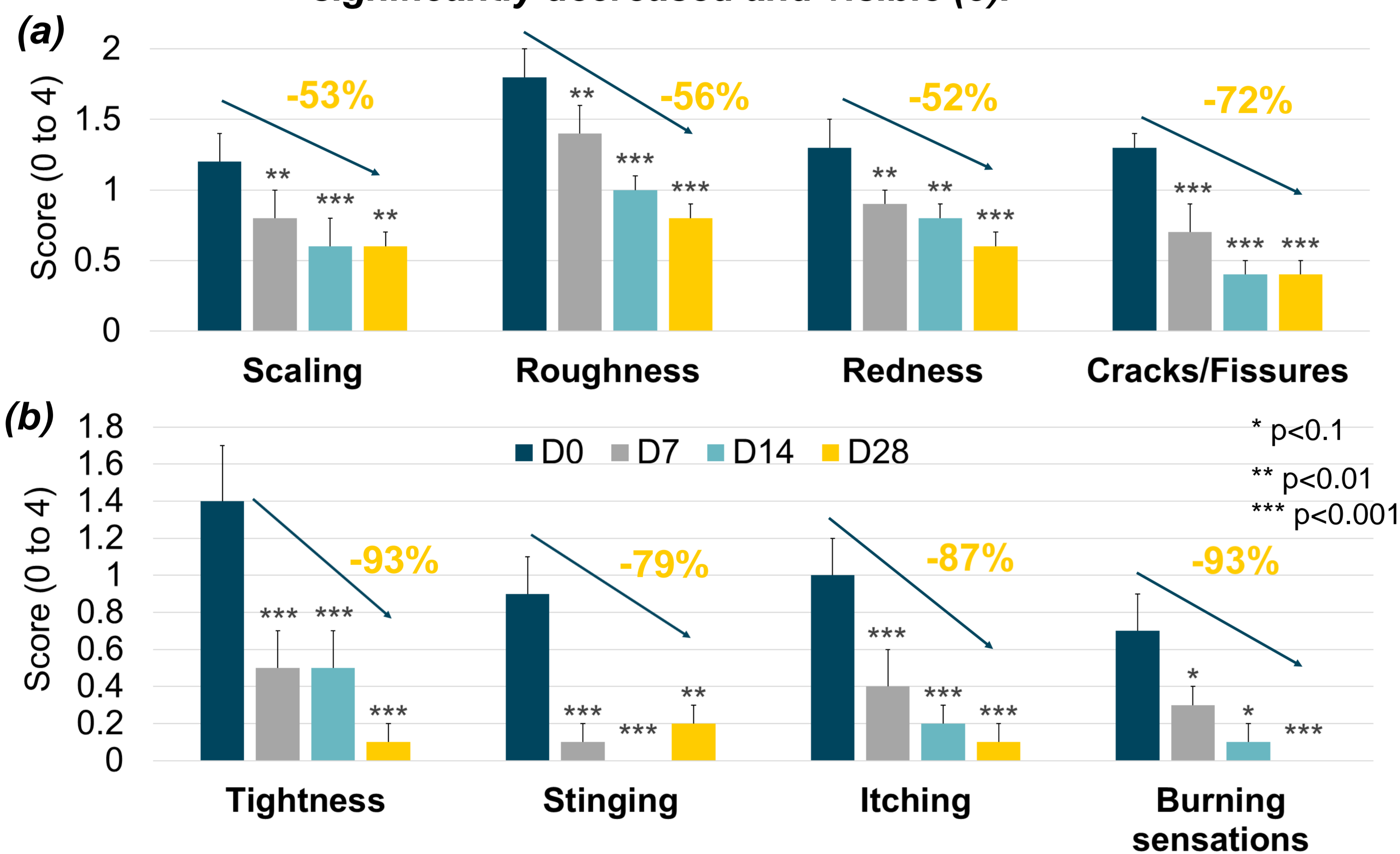
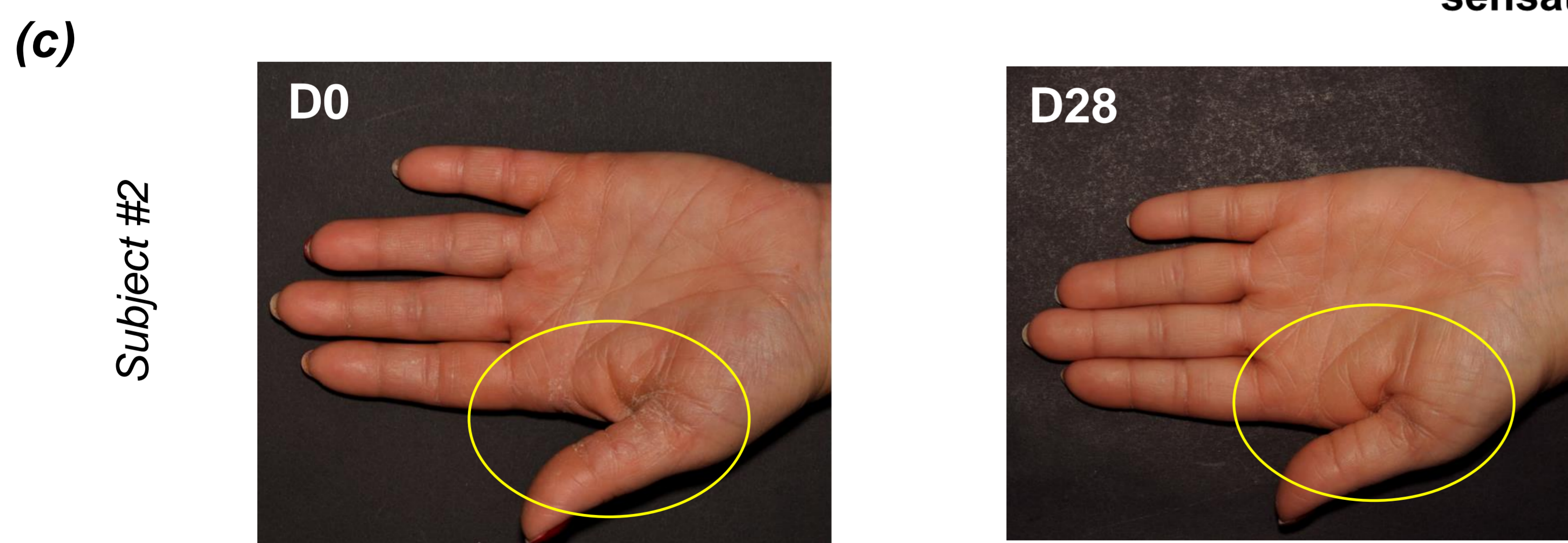
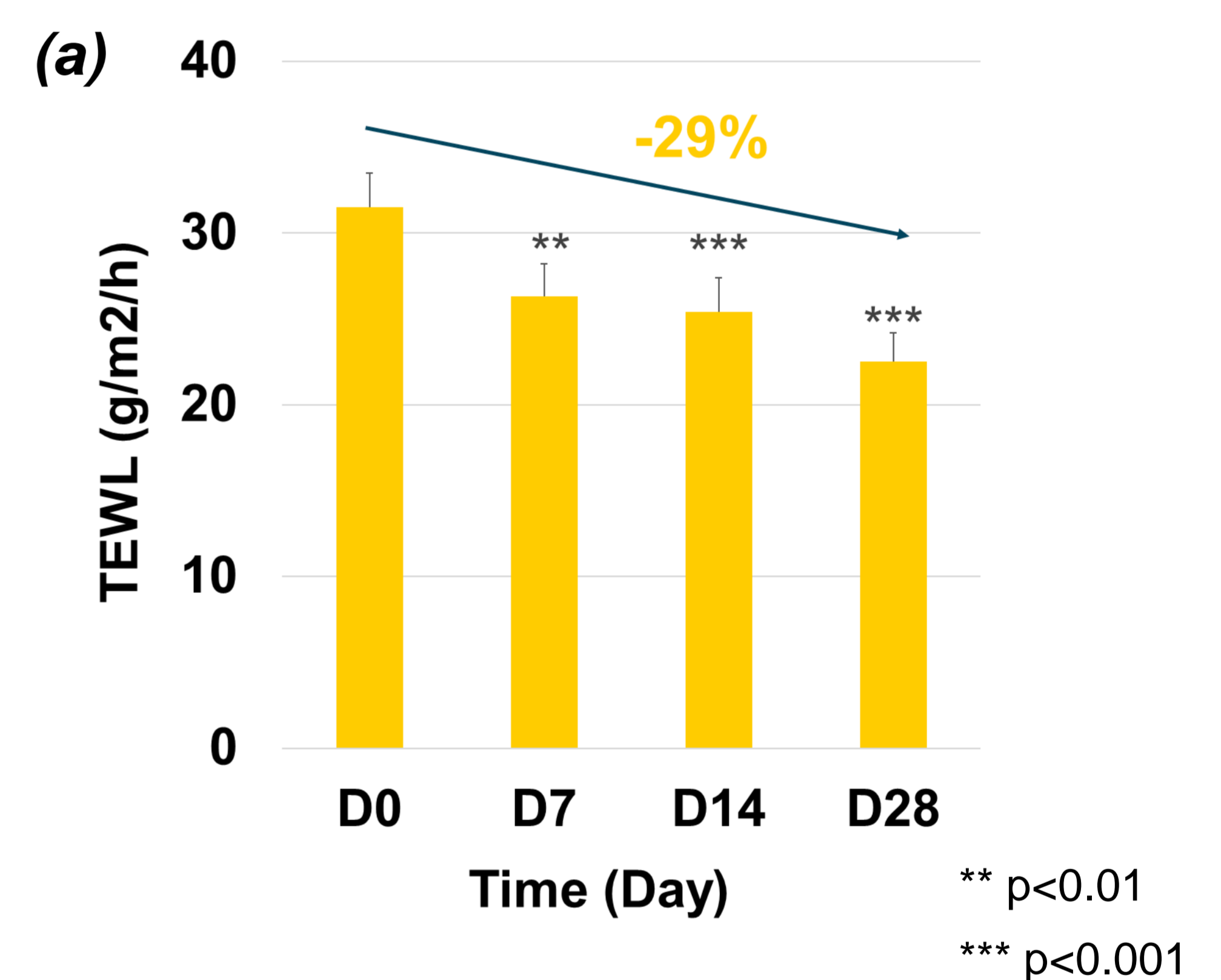


Figure 2: TEWL (a) and crack's length (b) significantly decreased.



The subjects were very satisfied with the product, especially it penetrated quickly (97%), left a protective barrier on the skin (87%) without a greasy and sticky after feel (90%). No undesirable effect related to the product was reported.

CONCLUSION

This study demonstrated that this specific dermo-cosmetic product efficiently promotes skin repair, protects, and relieves the discomfort feelings of the damaged hands. This product is relevant in the management in hand irritant contact dermatitis for domestic and professional use.