INTEREST OF A SPECIFIC DERMOCOSMETIC PRODUCT IN SENSITIVE SKIN: FIRST STUDY IN THAILAND

Helena Polena¹, Waranya Boonchai², Pichanee Chaweekulrat², Silada Kanokrungsee², Christelle Graizeau^{1,3}, Michèle Sayag¹, Elodie Prestat-Marquis¹

¹NAOS Ecobiology Company (Bioderma), Research and Development Department, Aix-en-Provence, France; ²Department of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand; ³NAOS Institute of Life Science, Aix-en-Provence, France

INTRODUCTION

Sensitive skin syndrome (SSS) is characterized by neurogenic inflammation and barrier function alteration, leading to unpleasant sensations, sometimes associated with clinical signs such as redness, in response to stimuli that normally should not provoke such sensations. It has an impact on patients' quality of life as symptoms occur immediately following exposure in response to different stimuli (chemical, mechanical, thermal, pollution...). Consequently, the use of adapted skin care products is essential for patients suffering from SSS. In this context, the tolerance and efficacy of a specific dermocosmetic cream was evaluated in subjects presenting SSS in Thailand, where no study has been yet published.

MATERIALS & METHODS

In an open-label, single-center, prospective study, 39 subjects reporting facial sensitive skin with the Burden of Sensitive Skin (BoSS) score equal or higher than 20 (out of 56), applied the cream twice daily for 28 days (D28). There were 34 women and 6 men with mean age 43 years old, predominantly having dark phototypes (IV: 55%, V: 30%). The assessment of the clinical signs (redness, dryness, roughness, squames) were performed by both the investigators and the subjects using a 11-point scale at baseline and D28. Similarly, the functional signs (itching, tightness, tingling, heat sensations and pain) and the quality of life (Burden of Sensitive Skin (BoSS) questionnaire) were evaluated by the subjects. Adverse events were reported by the subjects during the study if noticed, and the global cutaneous acceptability was evaluated by the dermatologists at D28 using a 4-point rating scale. In addition, the skin hydration (corneometer) and the transepidermal water loss (tewameter) were evaluated at baseline and D28.

RESULTS

After 28 days of use, the cream significantly reduced all the clinical signs according to the investigators (Figure 1) and to the subjects (Figure 2), compared to baseline. Similarly, the cream significantly decreased functional signs (Figure 3). In addition, the skin hydration significantly increased by 15% while the TEWL decreased by 6% at D28 vs baseline, demonstrating a skin barrier function restoration. The BoSS total score was reduced by 12% at D28, close to statistical significance (p=0.057), tending to show an improvement of the quality of life. Finally, 87.5% of the subjects presented a good to very good tolerance to the cream according to the dermatologists.

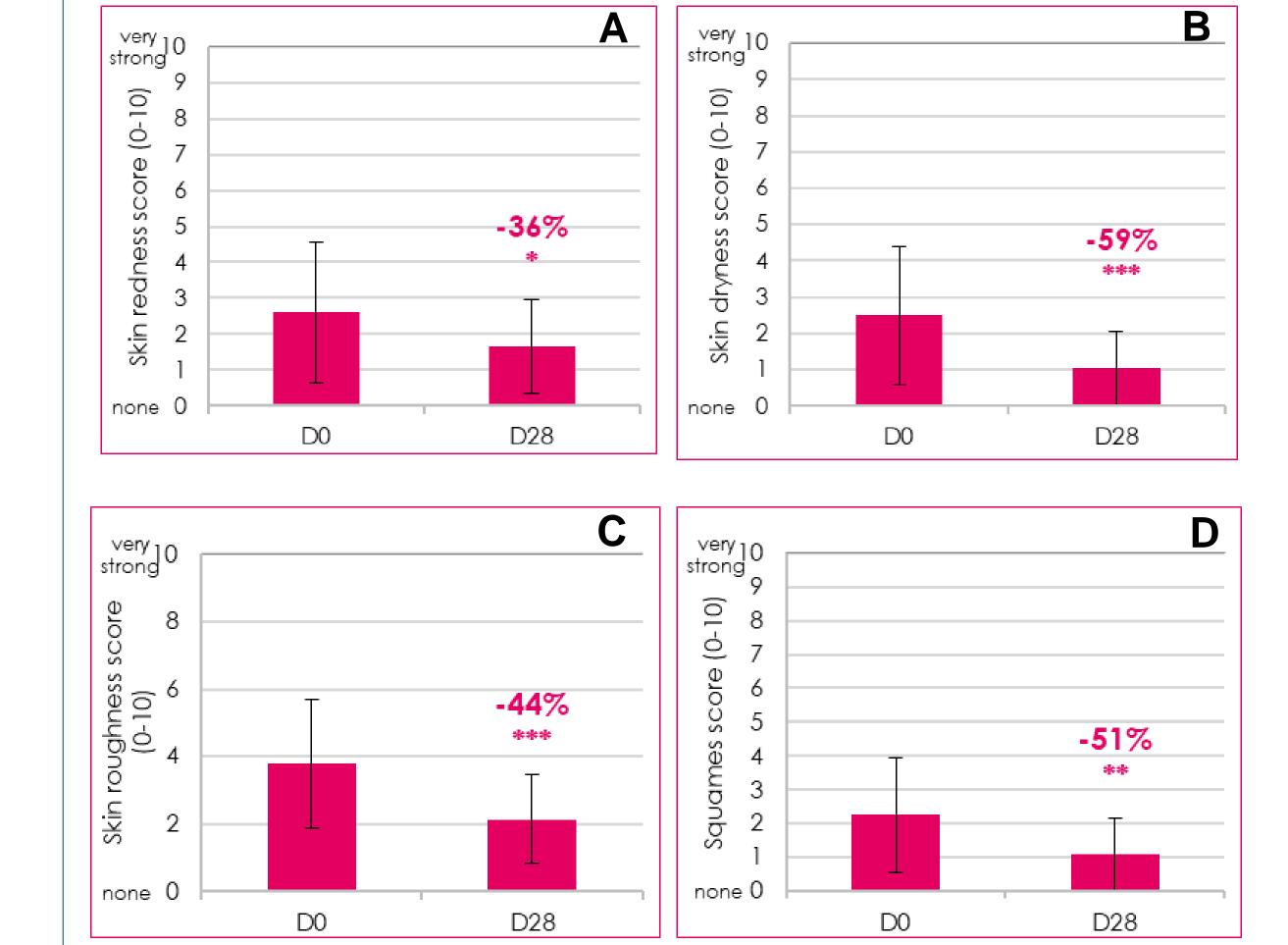
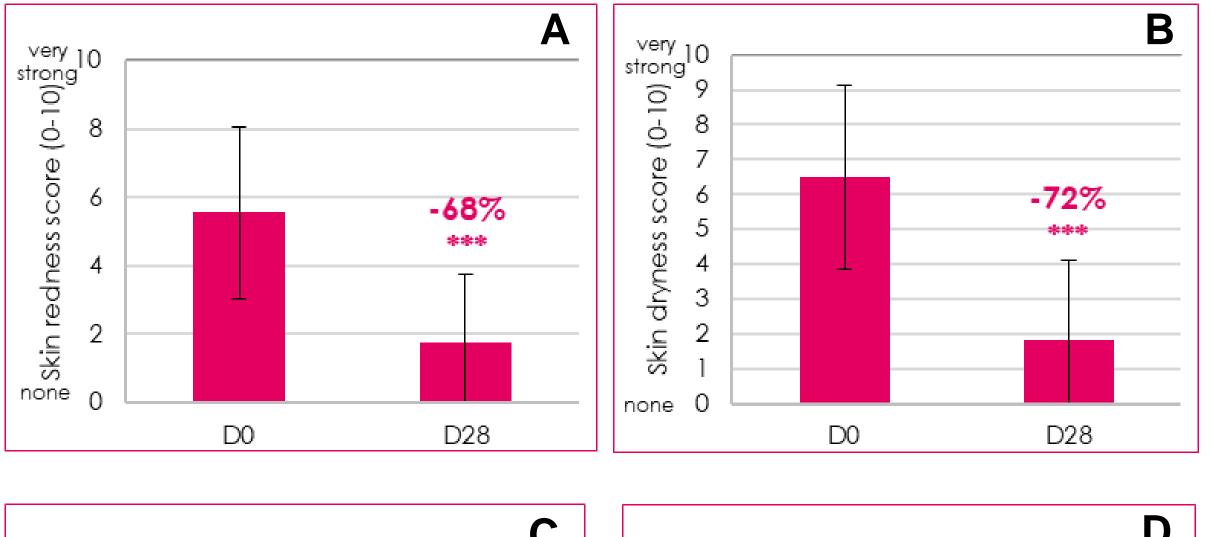


Figure 1: Skin redness (**A**), dryness (**B**), roughness (**C**) and squames (**D**) clinical evaluation between D0 and D28 (*p<0.05, **p<0.01, ***p<0.001 Wilcoxon's test).



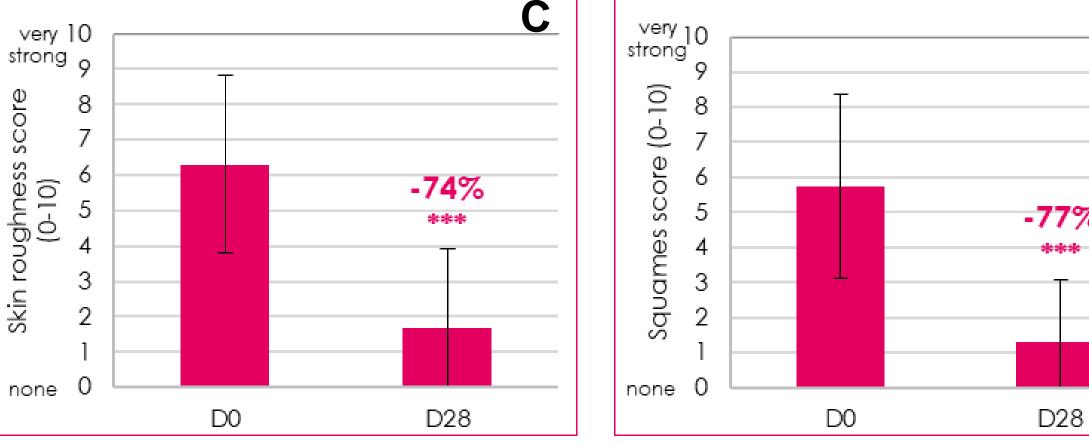


Figure 2: Skin redness (**A**), dryness (**B**), roughness (**C**) and squames (**D**) evaluation by the subjects between D0 and D28 (***p<0.001 Wilcoxon's test).

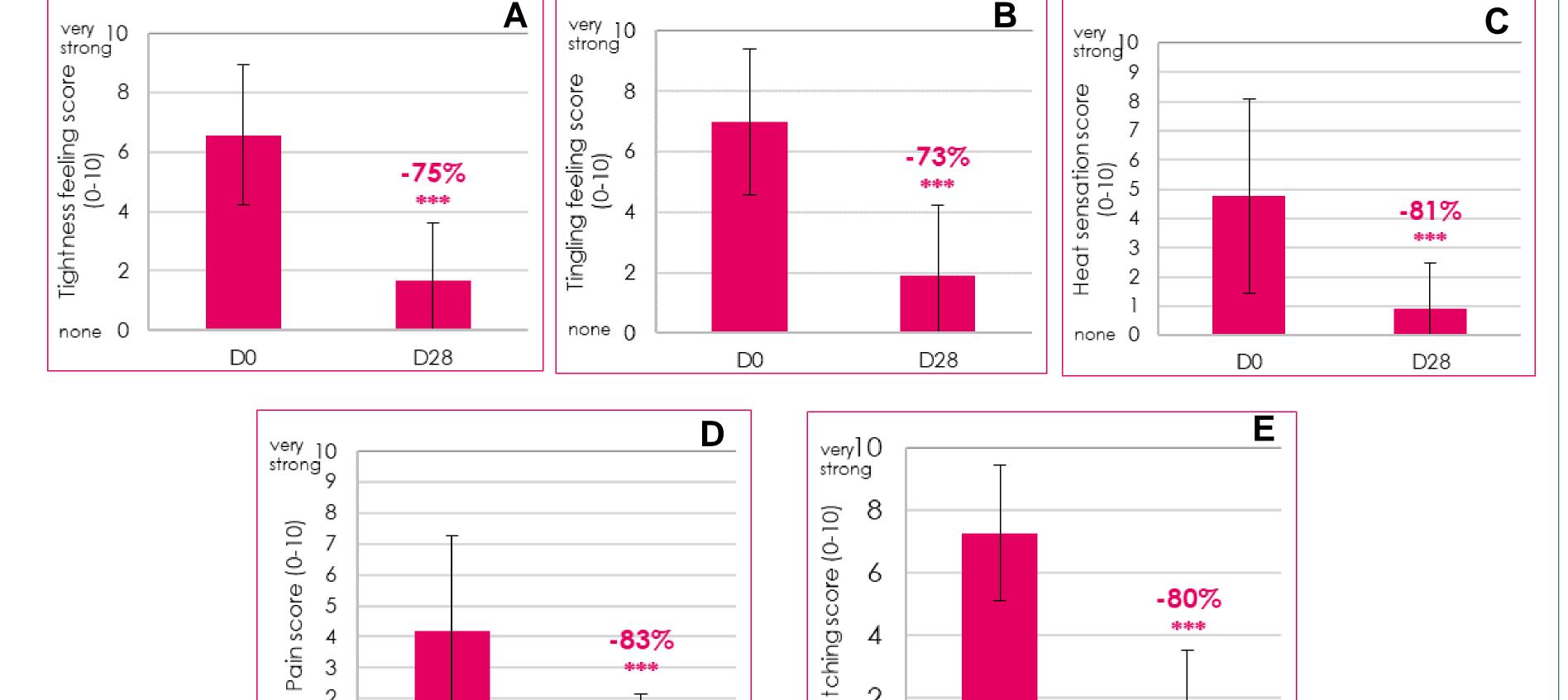


Figure 3: Feeling of tightness ($\bf A$), tingling ($\bf B$), heat sensations ($\bf C$), pain ($\bf D$) and itching ($\bf E$) evaluation by the subjects between D0 and D28 (***p<0.001 Wilcoxon's test).

D28

D0

D0

D28

CONCLUSION

The studied dermocosmetic cream was judged as suitable for a daily use in Thai patients suffering from SSS. In addition to a good tolerance, it helped to improve SSS symptoms, skin barrier function and patients' quality of life.