Clinical Evaluation of the Moisturizing and Soothing effects of a Serum Containing Hyaluronic Acid with Botanical Ingredients on Sensitive Skin

Weimin Song¹, Jiewei Wu², Fei Liu^{2*}

1 Hang Zhou YesSkin Hospital, Zhejiang Province, China; 2 SkinCeuticals, Shanghai, China

Introduction

Sensitive skin refers to a state of hyper-reactivity of the skin that occurs under physiological or pathological conditions, mainly on the face, where irritation causes symptoms such as redness, itching, flaking, burning, or stinging. Due to its complex etiology and pathogenesis, effective treatments are lacking.

Objective

To evaluate the moisturizing and soothing effects of a serum containing hyaluronic acid with botanical ingredients (Formula number 74001529) on sensitive skin.

Materials and methods:

A prospective, randomized, split-face, controlled trial was conducted with 30 Chinese male and female participants aged 18-60 years with a lactic acid tingling score ≥3. One side of the face was randomized to receive the test product and the other side to receive saline solution. One application was made every morning and evening for 14 days. Before application of the product (baseline) and after 14 days of product use, the skin stratum corneum moisture content, skin transdermal water loss, cutaneous hemoglobin content, and skin redness values were measured; after 14 days, product satisfaction was assessed by questionnaire. This study was approved by the Institutional Review Board of YesSkin Hospital, and written informed consent was obtained.

Results

Compared to baseline, the skin on the test product side on day 14 showed a significant increase in cutaneous stratum corneum moisture content (20.20% increase), and significant decreases in transdermal water loss (14.55% decrease), cutaneous hemoglobin content (7.49% decrease), and skin redness a-value (7.91% decrease). Compared to the side treated with saline, on day 14, there was a significant increase in the moisture content of the cutaneous stratum corneum, and significant decreases in transcutaneous water loss, cutaneous hemoglobin content and skin redness a-values on the test product side. Participants were 100% satisfied after 14 days of using the test product.

Conclusion

The test serum has moisturizing and soothing effects on sensitive skin.

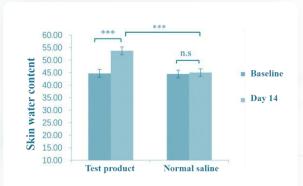


Figure 1 . Moisture content of cutaneous stratum corneum . *** P < 0.001

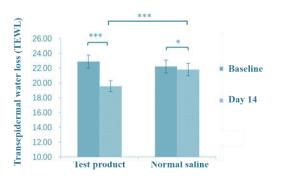


Figure 2. Transdermal water loss. * P<0.05, *** P <0.001