

〈原 著〉

敏感肌を特徴づける試み

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An Attempt to Characterize Sensitive Skin in Japanese Females

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Abstract

We performed comparison of biophysical skin parameters of the facial skin in healthy Japanese females (ages 26 to 41 years) between 14 claiming to have sensitive skin and 17 not to have sensitive skin from November 4 to 16, 1999. We measured transepidermal water loss (TEWL), a parameter for the water barrier function of the stratum corneum (SC), high frequency conductance, a parameter for the hydration state of the SC and skin color in CIELAB color space system on the cheek and sebum output with Sebutape® on the forehead in an environment-controlled room. Moreover, we conducted stinging test with 10% lactic acid and assessed erythema formation with 0.1% methyl nicotinate by measuring a^* with chromameter. In the self-claiming sensitive skin subjects, TEWL values and a^* values tended to be higher, whereas conductance values were lower than the non-sensitive skin subjects, although there was no statistical significance. Moreover, the peak scores of stinging to lactic acid were significantly higher and the erythematous response to methyl nicotinate appeared quicker in the self-claiming sensitive skin subjects. Thus we think that at least, partially sensitive skin results from higher penetrability of the skin to applied chemicals.

Key words: sensitive skin, non-invasive measurement, lactic acid, methyl nicotinate