

〈教育セミナー〉

敏感肌研究の各社の取組み：敏感肌をどう考え、どう開発するか

敏感肌—角層細胞からのアプローチ—

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Consideration for the Sensitive Skin from the Point of Corneocytes Morphology

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Abstract

There is a growing demand for the cosmetics products which are specifically designed for sensitive skin. In order to develop the effective products for sensitive skin, cosmetic manufactures need to understand the causes and to have a reliable means of evaluating the degree of sensitivity. Our previous study revealed that the meaning varies somewhat among individuals, but that there is a consensus on specific reasons to which they refer when they report having sensitive skin. These reasons include experiences of some uncomfortable symptoms using cosmetic products, tendencies for their skin to have acne or pimples and become dry and flaky. Also the development of skin sensitivity is often related to a reduction in the barrier function and water holding capacity of stratum corneum. Therefore, a method could be developed by using certain biophysical properties of corneocytes to predict skin sensitivity. Our search for such an objectively measurable sensitivity index led us to the discovery that a certain parameter of the average projected area of corneocytes obtained via tape stripping at a specific area of facial skin can be used for this purpose. This method is now applied for the evaluation of our customer's skin on skin counseling.

In this article, we would like to introduce the cosmetic manufacturer's way of thinking about sensitive skin, and also would like to describe the condition of the Japanese women's sensitive skin through the measurement of corneocytes, obtained by tape stripping, employing the parameters of the average projected area of corneocytes, the cellular arrangement and the thick abrasion. And we would like to consider the seasonal differences in the sensitive skin based on the data of corneocyte parameters we have obtained. Furthermore, we will discuss how the regional differences in Japan affect the corneocytes morphology, based on the data obtained through the practical test of the product, which was conducted at the same season. In conclusion, sensitive skin, some exceptions, does not stay in a permanent condition, but is easily affected by external environments from one season to another.

Key words: skin sensitivity, corneocytes, non-invasive method, tape stripping, the average projected area of corneocytes (APAc), the thick abrasion, the cellular arrangement, seasonal change.