

〈ノート〉

## 画像解析を用いた重層剥離の評価検討

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### **Evaluation of Multilayered Stratum Corneum by Image Analysis System**

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(Accepted: September 25, 2013)

#### **Abstract**

A multilayered stratum corneum is generated when skin moisture reduces. Several reports revealed on the assessment of the multilayered stratum corneum using different analytical methods. We performed an imaging analysis of the multilayered stratum corneum obtained using a tape-stripping method. An eosin staining method was performed to conduct short-term analysis of the stratum corneum and revealed that an eosin dye solution acidified the tissues for a short period. Moreover, we could achieve an image binarization of only the stratum corneum by extracting the luminosity picture of complementary green color using the dye sample image. Furthermore, extracting only the multilayered stratum corneum increased the luminosity by 1.5 times over the usual threshold. The differences with imaging were examined under these conditions. The results of this imaging analysis revealed a high coincidence rate and suggest that the short-term dyeing method allowed the same imaging quality.

**Key words:** stratum corneum, image analysis.