

〈原 著〉

## 口唇に関する基礎的研究（第2報）

——表面形態と口唇荒れ——

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### Morphological Characteristic of Lip Surface and Lip Chapping

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#### Abstract

Lip surface configuration was analyzed by using replica method, and physiological parameters of lip were investigated to elucidate the morphological changes in the lip surface with chapping. First, we prepared replicas of the lips and evaluated the depth of vertical furrows on the lips as well as the ratio of the wrinkle area by image analysis. Then the replicas were magnified under a video microscope, and the densities of vertical furrows and of caved shapes between furrows were observed. Finally, we examined the relationship between these results and the clinical assessment of chapped lips or the measured physiological parameters. The results showed that the depth of vertical furrows, the ratio of wrinkle area and the density of vertical furrows did not correlate with the clinical assessment of chapped lips nor the measured parameters. However, the densities of the caved shapes between the furrows correlated to the chapping assessment and the parameters. It is considered that the severity of the lip chapping reflects the decrease in the number of caved shapes.

**Key words:** lip, morphology, image analysis, parameters, furrows, replica.