

〈原 著〉

## 化粧品に関する皮膚のトラブルと女性ホルモン周期に 関する調査・研究

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### A Study for Relationship between Cosmetic Skin Trouble and Hormonal Cycle in Female

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#### Abstract

The purpose of the present study is to clarify the effect of hormonal cycle in female on skin trouble due to cosmetics. We examined the actual circumstances by 1002 questionnaires, and made patch tests of methyl nicotinate, representing rubefacient, to estimate the epidermal penetration rate. Forty-five percent of subjects had skin trouble relating to cosmetics. The symptoms of skin trouble included itching (274), redness (195), papules (190), pain (132), dryness (128), heatness (116), smart (81), edema (48), pigmentation (44), erosion (34), blister (16) and others (15). One third of subjects with skin trouble due to cosmetics complained the change of symptoms by menstrual cycle. The changes of symptom were concentrated on premenstrual period. Fifty-six of 630 subjects who experienced delivery had skin trouble relating to cosmetics. The skin trouble developed mainly on the first trimester of the pregnancy. In patch test of methyl nicotinate, 3 out of 7 cases showed decreased threshold of the reaction on menstruation, and the other 3 cases showed increased reactivity of the skin of menstruation. Present study revealed that in some cases hormonal cycle in female may affect the pathogenesis of contact dermatitis due to cosmetics. We offer a hypothesis that reduced ratio of estrogen/progesterone may play some role in development of cutaneous manifestation.

**Key words:** contact dermatitis, cosmetic, menstrual cycle, methyl nicotinate