

〈原 著〉

## 香粧品成分のパッチテスト 9年間の成績

伊藤 正俊, 細野久美子, 関東 裕美, 木下三和子,  
山田 耕次, 黒坂理文子, 西村 誠\*

### Patch Tests Results with Cosmetic Ingredients Conducted between 1978 and 1986

Masatoshi ITOH,\* Kumiko HOSONO,\* Hiromi KANTOH,\*  
Miwako KINOSHITA,\* Koji YAMADA,\*  
Rimiko KUROSAKA,\* and Makoto NISHIMURA\*

#### Abstract

The frequency of moderately positive reactions in patch tests using cosmetic ingredients on eczema and dermatitis patients are summarized. Out of 8 tar color stuffs tested, the order of positive frequency in patch tests was commercial quinoline yellow WS 2.5%, followed by commercial brilliant lake red R and sudan III, both 1.1%. Parabens did not produce any moderately positive reactions. Out of 8 sun-screening agents, the positive frequency was 0.3% for three, that is, 5% amyl dimethyl PABA, 5% octyl dimethyl PABA and 5% p-methoxy cinnamic acid isopropyl ester. The other sun-screening agents were negative. The positive frequency of lanolin alcohol was 2.7%, hydrogenated lanolin 1.3%, and lanolin 0.3%.

The results of patch test using 32 synthetic raw fragrance materials are as follows. The positive frequency of cinnamic alcohol and cinnamic aldehyde was 2.8% and 1.7%, respectively. That of benzyl salicylate was 4.0%, benzyl alcohol 1.4%, and benzyl acetate 1.1%. The positive frequency of isoeugenol was 5.6%, eugenol 2.8%, 1-menthol 2.6%, hydroxycitronellal-S (AO) 2.6%, hydroxycitronellal-S (WP) 2.5% and citral 2.2%. That of isobornyl cyclohexanol was 1.8% and methyl-3-(trimethyl-2-2-3-cyclopentene-3-yl-1)-5-pentanol-2 was 2.4%. Therefore, the positive frequency was highest for isoeugenol, followed by benzyl salicylate, cinnamic alcohol, eugenol, 1-menthol, hydroxycitronellal, citral, etc. However, a gradual decrease was noted in the positive frequency of benzyl salicylate and cinnamic alcohol over the course of this study. Out of the essential oils tested, the positive frequency of ylang ylang absolute was 5.0%, followed by treemoss absolute, tuberose absolute, carnation absolute, opopanax resinoid, ylang ylang oil, jasmin Egypt absolute hexane, etc. However, a gradual decrease was noted in positive frequency of jasmin Egypt absolute hexane, ylang ylang absolute and treemoss absolute over the course of this study.

Patch test results using these fragrance materials were compared with related human and guinea pig sensitization test results. In addition to sensitization potency, other factors, especially the frequency of use of the chemicals, are thought to exert a great influence on patch test results.

**Key words:** Cosmetic ingredient – fragrance material – patch test