

〈原 著〉

Phenoxyethanol と他の若干化粧品原料と の組合せによる Stinging 現象

Stinging Phenomenon from Phenoxyethanol Combined with Other Cosmetic Materials

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Abstract

It was found that a topical antiseptic, phenoxyethanol (phenoxetol) combined with other ingredients of cosmetic products, such as ethanol, parabens, butylene glycol and potassium sorbate, induced severe stinging in some selected individuals (stingers). Thus, an attempt to establish an appropriate procedure for detecting and evaluating stinging activity on various cosmetic products is made.

Phenoxyethanol itself was found to have a weak stinging activity in 10 normal volunteers. However, phenoxyethanol combined with a few other cosmetic ingredients showed a strong stinging, especially an aqueous solution of 2% phenoxyethanol, 10% ethanol and 0.3% methylparaben in 17 normal volunteers.

Clear-cut stinging was restricted to the face, being most pronounced on the upper lip and nasolabial folds, followed by the infraorbital, forehead and chin.

Non-immunologic contact urticaria was also seen in some of volunteers, paralleling with stinging phenomenon. Twenty minutes' scarification patch tests were carried out in 5 female patients who complained of stinging from cosmetics. Urticarial responses were seen on applications of 2% phenoxyethanol with 10% ethanol, 2% phenoxyethanol with 0.3% methylparaben, and the combined 3 agents in 2 or 3 patients. The relationship between stinging and contact urticaria was discussed.

Key words

1. stinging
2. phenoxyethanol
3. ethanol
4. methylparaben
5. contact urticaria