

CONTACT DERMATITIS AND OCCUPATIONAL DERMATOSES

## PATTERN OF CONTACT SENSITIVITY DUE TO COSMETICS ALLERGENS IN INDIAN PATIENTS-A STUDY AT A TERTIARY CARE CENTER

Sweta Subhadarshani (1) - Gomathy Sethuraman (1) - Kaushal Verma (1)

All Institute Of Medical Sciences, Dermatology And Venereology, New Delhi, India (1)

Background: Cosmetics are one of the common causes of contact dermatitis worldwide. In India, the studies determining the cosmetics as the cause of contact dermatitis are limited. Therefore, we aimed to study the pattern of contact dermatitis due to cosmetics and determine the relevance of the positive allergens as a cause of contact dermatitis.

Material/methods: Consecutive clinically suspected patients of contact dermatitis due to cosmetics were patch tested with cosmetic series (CODFI approved Indian cosmetic and fragrance series), and patient's own cosmetics.

Results: The study had 50 patients, 34 males and 16 females between 18-72 years of age (mean age:  $44.16 \pm 10.29$  years). Patch test was positive in thirty-one (62%) patients. Twenty (40%) patients each were patch test positive to cosmetic series allergens and personal cosmetics. Preservatives were the most common incriminated allergens (30%) of which gallate mix was most frequently positive allergen (14%). Para-phenylene diamine was the second most common allergen (12%). Hair dye was the most common personal cosmetic positive (26%) followed by face cream (6%). We recognized three different clinical patterns in our patients: eczematous, lichen planus pigmentosus like and lichenoid dermatitis.

Conclusions: Cosmetic contact dermatitis is commonly caused by preservatives and hair dye. Patch test with cosmetic series alone may miss some allergic reactions, hence patient's personal cosmetics should always be tested. Also, the yield of patch test could have been increased if relevant allergens from Indian standard series (nickel, para-tertiary butyl phenone, fragrance mix, and parabens) were included in the patch test series.





