

Hand eczema—Clinical patterns and role of patch testing

Sir,

Hand eczema is one of the most common dermatological disorders caused by various exogenous and endogenous factors. An attempt has been made in the present study to identify the exogenous agents causing hand eczema with the help of standard series of patch testing, and to correlate the clinical pattern of hand eczema in relation to the allergens.

A total number of 50 patients with hand eczema attending the OPD for a period of 15 months were included in the study. These patients had hand eczema with morphological variants confined to hands. Patients in whom a clinical suspicion of psoriasis, lichen planus and fungal infection could not be disproved, as well as those who had widespread eczema in other areas of the body were excluded from the study. The rest of the patients were subjected to patch testing using Indian standard battery approved by CODFI, manufactured and supplied by Systopic Laboratories, New Delhi. The standard procedures for patch testing were

meticulously followed, taking all precautions.^[1]

The observations were graded according to the ICDRG recommendations.^[2] Among the 50 patients studied 28 (56%) were males and 22 (44%) were females, the ratio being 1.21:1 which is contrary to most studies where the incidence was higher in females.^[3] An overwhelming 64% of our patients belonged to the 3rd and 4th decades of life which is in concurrence with other studies.^[4]

Among the females, housewives were the most common occupational group (68.2%) and this is because of the variety of agents that they come in contact which may act either as irritants or allergens in addition to the trauma of rubbing and scrubbing.^[5] Of the males, 53.6% were skilled or semi-skilled workers like mechanics, engineers, masons and cooks. The contact with water, which is hypotonic, and the dissolution of the surface lipids by detergents or solvents, may be the reason for a higher incidence of contact allergy in people involved in the above occupations. There was an overlap of signs and symptoms but scaling was the most common presentation (82%), pruritus and dryness being the most common symptom (76%).

A positive patch test was seen in 82% of our patients which is high when compared with other studies. Patch testing has yielded positive results ranging from 50% to 92.5% in other studies.^[6] Potassium dichromate was the commonest sensitizer testing positive in 26% of the patients while nickel was the next common testing positive in 18% of the patients. The high positivity for potassium dichromate is explainable by its presence in detergents and cements.^[7]

An attempt was made to correlate the clinical patterns and causative agents by adopting the odds ratio. The odds ratio of discoid pattern of lesions and cobalt was highest at 11, and that with balsam of Peru was 7.33.

We encountered a high degree of patch test positivity in our patients and the Indian standard series proved to be very useful, but lacking in certain cases like hand eczema in housewives. Housewives formed the bulk of our study group and a high degree of sensitivity to vegetables has been established in the past.^[8] Inclusion of the extracts of common vegetables and fruits in the

series would be of immense value. A specific patch test series for the hands as in footwear series or textile series is suggested.

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