

## Evaluation of the Role of Patch Test in Endogenous Eczemas

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**Background:** It has been shown that Endogenous eczemas develop a significant degree of contact allergy sensitization detectable by patch tests. Determining any causal or aggravating factor can save the patient from the agony of persistent discomfort and restricted social life thereby considerably improving the Dermatology-specific quality of life. Patch test has been a proven modality for investigating exogenous eczemas but their role in endogenous eczemas, though promising has not been investigated much and overall they still remain an underused investigation.

**Objective:** The study was primarily conducted with the objective to evaluate the role of patch test in endogenous eczemas with an aim to identify any causal or aggravating allergen, the avoidance of which could augment response to standard therapy and prevent relapse.

**Methods:** Four groups of 27 consecutive patients each, with clinical diagnosis of one of the major endogenous eczema namely, atopic dermatitis, nummular eczema, pompholyx and seborrhoeic dermatitis satisfying the inclusion and exclusion criteria were included in the study. A detailed history was recorded, and a thorough general physical, systemic and dermatological examination was conducted. Routine complete blood count and urinalysis was done. Other investigations were done as and when needed. They were patch tested with the Indian Standard Patch Test Battery approved by the Contact & Occupational Dermatoses Forum of India (CODFI). Dermatology Life Quality Index (DLQI or Children's DLQI) was used at the presentation and at 3rd month of follow up to assist in assessing the subjective improvement after avoidance of the agents incriminated by the patch test.

**Results:** 108 patients were studied, 27 each in four groups with a clinical diagnosis of one of the four major endogenous eczemas.

Most patients (85.2%) with atopic dermatitis were less than 20 years and most patients (74%) with nummular eczema were more than 40 years of age. The occupational profile of the patients included students (37%), general duty soldiers (29.6%), housewives (17.6%), farmers (4.6%) and security guards (3.7%). The miscellaneous group accounted for the remaining 7.5%.

About 56.5% patients had one or more positive results in the study, with maximum 77.8% in pompholyx and minimum of only 37% in patients of seborrhoeic dermatitis group.

On follow up, 02 (7.4%) patients of nummular eczema and 04 (14.8%) of patients pompholyx had complete remission. 61 patients (56.5%) of the total (108) had partial improvement. 36 patients (33.3%) had no change and 5 patients (4.6%) had worsening of their eczema.

**Conclusion:** The patch test positivity rate was statistically significant in all eczema groups. The positive outcome in the form of clinical improvement or complete clinical cure following the avoidance of allergens implicated by patch testing was also statistically significant. This study recommends inclusion of patch test in the management protocol of endogenous eczemas especially those not responding to conventional treatment or recurring frequently.

Research conducted at Command Hospital Air Force, Bengaluru