

## **ABSTRACT:**

### **Aim of the study:**

To identify the allergens responsible for contact dermatitis among patients with hand eczema, attending dermatology OPD at Government Rajaji hospital, Madurai ,to study the relevance of patch testing in contact dermatitis of hand and to identify the clinical patterns of contact dermatitis of hand caused by various contact allergens.

### **Materials and methods:**

The study was carried out in the department of Dermatology, Government Rajaji hospital, Madurai medical college, Madurai. A total of 74 patients with hand eczema who attended the dermatology OPD during December 2016 to May 2017 were included in our study. All cases of hand eczema including males and females with age limit between 18 to 70 years were included in our study.

### **Methodology**

Patch testing was done by using Indian standard series battery, which was commercially available at Systopic laboratories, New Delhi. The readings were taken at 48hrs and 72 hrs and results were interpreted according to International Contact Dermatitis Research Group (ICDRG) criteria.

### **RESULTS:**

Various morphological pattern observed in our study was fissured pattern (43%), hyperkeratotic (12%), lichenoid(10%), pompholyx(4%), fingertip eczema(1%), ring pattern (1%)and mixed morphology(6%). Potassium dichromate was the commonest sensitizer observed in our

study(18.9%), followed by paraphenylenediamine(6.75%). In our study, current relevance was 79%, doubtful was 15%.

**Conclusion:**

Fissured pattern was the most common pattern noted in our study. Potassium dichromate was the commonest sensitizer observed in our study. Fissured pattern was noted high in potassium dichromate sensitivity.

**Key words:** Contact dermatitis, morphological pattern, patch testing, relevance