

# Contact sensitization pattern of patients with eczema at the face and neck region: A retrospective study between 2016 and 2022 at the Department of Dermatology Hospital Kuala Lumpur

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## ABSTRACT

**Introduction:** Allergic contact dermatitis (ACD) involving the face and neck region (FNR) is not uncommon. We aimed to determine the sensitisation pattern among patients with eczema involving FNR who underwent skin patch tests between 2016 and 2022. **Methods:** This is a seven-year retrospective review of contact sensitization patterns in patients with eczema over the FNR who underwent skin patch tests between 2016 and 2022 in the Hospital Kuala Lumpur. **Results:** There were 291 patients (female-to-male ratio of 7.8:1; mean age of 34.1±14.0 years) with eczema at the FNR who underwent a patch test. A majority (n=116,39.9%) were between 20 and 29 years old. About 8% were below 19 years of age. Nearly 50% had eczema over the perioral region, 8.6% in the periorbital area and the rest in other parts of the face and neck region. The clinical diagnoses included contact dermatitis (n=145, 49.8%), cheilitis (n=81, 27.8%), endogenous eczema (n=28, 9.6%) and others. All were tested with European baseline series, with 91.4% and 77.0% tested with extended series, and own products, respectively. About 70.1% were sensitized to at least one allergen. The most common sensitizing allergen was nickel sulfate (34.0%), followed by cobalt chloride (11.7%), fragrance mix (10.7%), methylchlorisothiazolinone/methylisothiazolinone (8.9%), and formaldehyde (8.9%). Clinical relevance was documented in 58.8% of them. **Conclusion:** Contact sensitization was detected in about 70% of patients with eczema at the FNR who were patch-tested. Nickel, cobalt chloride and fragrance mix were the most common sensitizing allergens.