



ATOPIC ECZEMA/DERMATITIS

## IN-VIVO CUTANEOUS ALLERGY TESTS AMONG CHILDREN WITH ATOPIC DERMATITIS IN SCHOOLS OF KAVRE DISTRICT, NEPAL

S Kc<sup>(1)</sup> - D Karn<sup>(1)</sup>

*Dhulikhel Hospital Kathmandu University, Kathmandu University-dermatology Department, Dhulikhel, Nepal<sup>(1)</sup>*

**BACKGROUND:** Atopic Dermatitis (AD) has a global prevalence however is reported more from the urban societies. There are limited studies relating AD in Nepal.

**OBJECTIVES:** The objective was to determine the prevalence of AD among school children of Kavre district. It also studied difference in prevalence between rural and urban communities and sensitivity pattern using in-vivo cutaneous allergy tests.

**MATERIALS AND METHODS:** A cross-sectional, community based descriptive study to reveal the prevalence; with nested case control cohort to compare the demographics and sensitivity pattern of AD was conducted. It was carried out in eight schools of the district for one year; four each from urban and rural communities. All children up to primary level were screened for AD. Twice the number of cases (school grade and gender matched) was selected as control group. Guardians of suspected children and controls were interviewed using self-administered questionnaire. In-vivo cutaneous tests; skin prick and patch tests were performed.

**RESULTS:** Total of 155 children were found to have AD among 1896 screened students. Point prevalence of AD was found to be 8.2 per 100 examined children. Statistically significant children of AD were found in urban setting ( $p = 0.017$ ). While comparing diseased population with nested cohorts ( $N=194$ ), significant difference was found among maternal education and preterm delivery. No association was observed among variables; obesity, dampness in house or home pets. Total of 118 children (76.12%) with AD had sensitivity with at least one allergen in prick test than 29 (14.94%) control subjects ( $p=0.000$ ). House dust mite was the most common sensitive allergen (53.2%).

**CONCLUSION:** Point prevalence of AD among children of primary level in schools of Kavre district was 8.2% with higher prevalence in urban communities. House dust mite was the most common tested allergen in skin prick test.

