SUMMARY
The present study was conducted at the Allergy Clinic, Immunology and Biochemistry Laboratory, Department of Pediatrics, M.L.B. Medical College, Hospital, Jhansi. A sample of 55 children which included 38 allergy patients and 17 children as control cases were considered in the study. All the cases were below 19 years of age. The study group was divided into following categories of patients - Bronchial asthma (23), Allergic rhinitis (3), urticaria (7), and allergic rhinitis with bronchial asthma (5).

Primary aim of present study was to study the spectrum of allergic illness in children and to know its positivity by skin prick testing, using 26 allergens. The reactivity of histamine at different ages was noted and precipitating factors in allergic disorders were observed.

Allergy testing was done by modified prick test method using prick test solutions. Saline was used for negative control and histamine for positive control.

Besides skin prick test, eosinophil count was calculated and stool examination was done for ova & cyst.

**FAMILY HISTORY OF ALLERGY AND SEX**

In the present study positive family history of atopy was found in 39.13%, 66.6%, 14.28% and 40% cases of bronchial asthma, allergic rhinitis, urticaria and
bronchial asthma in conjunction with allergic rhinitis respectively. In the present study, it was observed that nasobronchial allergy was common in male as compared with female. In urticaria, family history of atopy was present in 14.28% cases.

**EOSINOPHIL COUNTS IN DIFFERENT CLINICAL GROUPS**

Maximum mean eosinophil count of 8% was seen in bronchial asthma, allergic rhinitis. Approximately 73.91% cases of asthma were having absolute eosinophil count more than 250 cells/cumm, cases of allergic rhinitis had 66.67% and those of urticaria had 57.14%. Allergic rhinitis associated with asthma showed eosinophilia (AEC ≥250 cells/cumm) in 80% cases. Eosinophils was of the highest degree in those cases of bronchial asthma who had associated rhinitis (mean eosinophil count 790 cells/cumm).

**INTESTINAL PARASITES IN ALLERGIC DISORDERS**

In bronchial asthma, 5 out of 18 cases (27.8%) were positive on stool examination (3 for cysts of giardia lamblia, one for ankylostoma duodenale and one for cyst of ascaris lumbricoides). Absolute eosinophil count was higher in cases having helminthic infestation than in those who had protozoal infection or those who showed stool examination negative for ova/cyst.

Stool was positive for cyst of giardia lamblia in 2 urticaria cases and after the treatment for giardia lamblia, recurrence of urticaria did not stop.
SKIN PRICK TEST REACTION

Skin prick test was done in 18 cases out of 23 cases of bronchial asthma. Out of 18 cases 11 (61.11%) showed positive reaction; in 4 cases of urticaria and 2 cases were positive.

Skin prick test was done in three cases of allergic rhinitis and all cases showed positive reaction. In 4 cases of bronchial asthma associated with rhinitis, out of 4 cases 3 showed positive reaction.

REACTION OF HISTAMINE AT DIFFERENT AGES

Reaction of histamine was lowest in infants who were clinically suspected to be suffering from milk allergy. Among asthma, cases, maximum reactivity (both wheal and flare) of 31 mm (with multiple pseudopodia) was seen in 7 years old child.

DUST IN BRONCHIAL ALLERGY

Nine (40.91%) of bronchial allergy cases gave positive reaction to dust. Among the various sources of dust, house dust gave the maximum positivity rate (35.71%). This could be the result of Jhansi having a dry climate for most of the time in a year. The next common dust allergen was cotton dust seen in 21.42% cases followed by wheat dust in 17.85% cases.
POLLENS IN BRONCHIAL ALLERGY

Five (22.78%) cases in the present study gave positive reaction to pollens. There were 10 pollen extracts used in the present study. Positive reaction to pollen of parthenium was commonest (3 out of 5) among pollens. This could be explained on the basis of high growing of parthenium in Jhansi - Bundelkhand region.

INSECTS IN RESPIRATORY/BRONCHIAL ALLERGY

Six (27.27%) cases gave positive reaction to insect antigens. In the present study, 4 insect antigens viz. mosquito, ant, cricket, house fly were used. Positive reaction to mosquito was the commonest among insect allergens.

FUNGUS IN RESPIRATORY ALLERGY

Two (9.09%) cases gave positive reaction to fungus. One to aspergillus flavus another to Candida albicans.

SKIN PRICK TEST IN CHRONIC URTICARIA

Skin prick test was done in two cases and one was positive for urad dal and one for egg. But, on withdrawal of urad dal, and egg, symptoms did not subside.