

Prevalence of Allergic Rhinitis, Allergic Conjunctivitis and Atopic Dermatitis in Children with Recurrent Wheeze

We studied 260 children with recurrent wheeze for the presence of allergic rhinitis, allergic conjunctivitis and atopic dermatitis by a questionnaire based survey. We observed that 35% wheezers had allergic rhinitis, 15% had allergic conjunctivitis and 19% had atopic dermatitis. Nasal and eye allergies were often not recognized.

Key words: *Atopy, Asthma, Allergic conjunctivitis, Allergic Rhinitis, Wheeze.*

Allergic disorders have become a major burden in affluent Western societies as well as in developing countries. Very often a patient has more than one allergic condition(1).

We conducted a prospective, observational, questionnaire based study in the Department of Pediatrics, Holy Family Hospital, New Delhi between June 2005 and December 2006. Two hundred and sixty children between 2 and 12 years of age, with history of recurrent wheeze in the past one year, were studied using ISAAC Phase-I questionnaires with some modifications(2). The questions were regarding the presence of wheeze and other allergies in the children, and their severity and effect on their lifestyle. The questions were asked from parents of younger children and directly from the older children under parental supervision. No clinical examination was performed for the study.

We found a very high prevalence of other allergies in children with recurrent wheeze (**Table I**). About 35% of our wheezers had nasal allergy, 15% had eye allergy and 19% of the study population had skin allergy. More than half of the wheezers had either one or more allergies associated with wheeze, with most undiagnosed. Only 24% of recurrent wheezers were ever given a diagnostic label of asthma. We did not find any significant difference regarding the overall prevalence of other allergies between the young and older wheezers.

The present study is limited due to a small study population, being a hospital-based survey, differences in comprehension of the questions by the respondents and lack of clinical examination and specific tests. We have not looked at the prevalence of wheeze or allergies in the community, nor have we attempted to compare the prevalence of other allergies in recurrent wheezers with non-wheezers.

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REFERENCES

1. Von Mutius E. The burden of childhood asthma. *Arch Dis Child* 2000; 82: 112-115.
2. Asher MI, Keil U, Anderson HR, Beasley R, Crane J, Martinez F, *et al.* International Study of Asthma and Allergies in Childhood (ISAAC): rationale and methods. *Eur Respir J* 1995; 8: 483-491.

TABLE I RECURRENT WHEEZE AND OTHER ALLERGIES

Wheeze and other allergies	Cases (n=260)	%
Wheeze + Rhinitis	51	19.6
Wheeze + Dermatitis	31	11.9
Wheeze + Rhinitis + Conjunctivitis	22	8.5
Wheeze + Rhinitis + Dermatitis	11	4.2
Wheeze + Conjunctivitis	08	3.1
Wheeze + Rhinitis + Conjunctivitis + Dermatitis	07	2.7
Wheeze + Conjunctivitis + Dermatitis	01	0.4
Wheeze only	129	49.6