

CORRESPONDENCE

United airway disease: a reality in early life?

To the Editor:

We were interested in the Editor's choice November 2015 issue, concerning a cross-sectional, multicentre study in Portugal that applied an adapted questionnaire from ISAAC to parents of children aged between 3 and 5 years. The authors aimed to estimate the prevalence of current wheezing (CW) in preschoolers and to study the association between CW and current rhinitis (CR), considering its severity/persistence. They showed that CW was present in one-fourth of preschool children and was associated with rhinitis emphasizing the need for concurrent evaluation of nasal and bronchial symptoms even in young children (1).

The investigators had also demonstrated previously in a nationwide study that mild intermittent rhinitis was present in 30%, mild persistent in 3%, moderate–severe intermittent in 7% and moderate/severe persistent rhinitis in 5% of preschool children (2).

In Curitiba (Brazil), we explored whether rhinitis symptoms were associated with wheezing in the first year of life by means of a standardized questionnaire applied to parents of infants 12–15 months old. A quarter had recurrent wheezing (≥ 3 episodes), and the prevalence of allergic rhinitis symptoms was 48.3%, beginning at 6 months of age, without gender predominance. There was an association of allergic rhinitis symptoms with recurrent wheezing (23.1%) in the first year of life. Infants with symptoms of allergic rhinitis had higher physician diagnosis of rhinitis symptoms than those without such symptoms (32.4% vs. 8.9%) (3).

A birth cohort of 1,237 children in Singapore had been followed up to 18 months. Patients with nasal symptoms in the last 2 weeks were selected, and had monthly calls for the detection of recurrent rhinitis (symptoms in the last 4 weeks). Nasal swab was collected for molecular detection of virus during episodes of rhinitis. At 18 months, they were prick tested for common environmental allergens and foods.

Recurrent/extended rhinitis was associated with parental history of atopy and presence of comorbidities such as eczema and wheezing, but no allergy sensitization was demonstrated by skin tests. The frequency of respiratory virus detection in quarterly visits or episodes of rhinitis did not differ between children with recurrent rhinitis and controls (4).

A database medical record analysis of 1,549 asthmatic children up to 14 years of age attending a tertiary university hospital demonstrated that 74% of children under 2 years had rhinitis and 36% had allergic rhinitis with positive skin test to at least one aeroallergen (5).

A cohort study conducted in Germany (MAS: Multicentre Allergy Study) has shown that children up to 5 years of age with allergic rhinitis had almost four times more a chance of developing asthma between ages 5 and 13 years (RR = 3.82), a clear early associated comorbidity. In this same population, there was a higher prevalence of wheezing episodes per year among those who had more severe and persistent rhinitis according to the classification of ARIA (6,7).

Evidence from cohorts in different population as well as results from cross-sectional observations are indicating that rhinitis is common in young age and it is associated with recurrent wheezing. In addition, a literature search has not shown any studies that do not confirm this relationship in preschool children.

In conclusion, allergic rhinitis and wheezing in preschool children were concurrently seen, and perhaps the united airway disease concept holds true in early life.

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DOI:10.1111/pai.12536

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