

EDITORIAL

On early metabolite exposure influencing asthma outcome, the risk of hymenoptera allergy in a birth cohort, and improvement of food allergy management at school

Welcome to this first *Pediatric Allergy and Immunology* issue of 2019, with which we aim to provide you through targeted reviews with the latest updates in science and clinical practice, and through original articles and Letters with the best in research.

This issue features three reviews covering major clinical topics in the field of Allergy and Immunology in children. Papadopoulos et al¹ have analyzed unmet needs in the management of asthma and they quest for a specific definition of childhood asthma, which shall impact treatment options for disease control and control of disease progression. Similar to asthma, urticaria is a disease most prevalent through the various ages of life, nevertheless with unique clinical specificities in childhood. These are reviewed by Kudryavtseva et al² who also address specific treatment aspects in children. In the third review, Cavkaytar et al³ offer a comprehensive overview of epidemiologic data and the practical approach to the management of NSAID hypersensitivity in children and adolescents.



Kimberly Berger

I would also like to attract your attention to the article published in this issue by Berger et al.⁴ To examine the potential influence of various phthalate metabolites and bisphenol A on asthma, these compounds were measured twice in urinary samples of pregnant mothers and asthma was assessed by pulmonary function testing at age 7 in their children. The authors found an association between phthalate exposure and probable asthma, opening more research opportunities notably in defining the role of metabolite exposure on development of sensitization as well as allergic asthma. A study published earlier in PAI had also highlighted the influence of metabolic compounds on asthma,⁵ and it has been shown that metabolic compounds are only one part of a much more larger set of environmental exposures with a possible influence on respiratory health.⁶ Asthma is a complex disease, with its pathogenesis being largely influenced by environmental exposure before birth, as well as at various ages in childhood.⁷ Only integration of these parameters as widely as possible in prospective cohorts can help elucidate asthma and provide effective strategies to cope with its development.



Danielle Clifford

The second highlighted article in this issue reports on a common concern of parents—the risk of allergy after a bee or wasp sting—which is less frequently addressed in prospective cohort studies than sensitization to respiratory or food allergens.^{8–11} The study by Clifford et al¹² has prospectively assessed for sensitization to bee and wasp venom, as well as for allergic reactions after accidental field stings in Irish children recruited to the BASELINE cohort. Skin test positivity was below 1% at 2 and 5 years of age, and some children with positivity at 2 years had negative tests at 5 years. Also, positivity was not always related to previous exposure. Slightly more than 20% of the children had been stung by age 5, with a similar rate in urban or country children. Finally, only 2% of the children who had been stung reported a systemic reaction. Overall, the study results are reassuring and show the benignness of hymenoptera stings in these preschool children.



Johannes Savolainen

In the third study highlighted in this issue of PAI, Savolainen et al¹³ have investigated the reliability of the diagnosis of food allergy in school children. Starting from the school register mentioning a food allergy and implying a restrictive avoidance strategy, they went through a thorough history followed by a diagnostic algorithm including allergen-specific IgE testing and food challenges. After the diagnostic procedure and a 2-year follow-up, more than 65% of the study subjects could suspend their avoidance diet, resulting in a significant reduction of costs. The usefulness of individual school healthcare plan in allergic children has been stressed earlier in this Journal,¹⁴ and it has also been shown that a precise diagnosis allowing appropriate management in the community has a major effect on the child and its family.^{15–18} Also, a thorough diagnosis should be pursued: Food challenges are most contributable to the diagnosis and should not be delayed.¹⁹

Further articles published in this issue deserve your attention, and the editorial team hopes that they will contribute to the advancement of the knowledge and eventually help to improve the care we provide to children with allergic and immunologic diseases.

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