

EDITORIAL

Local rhinitis needs allergen-challenges for diagnosis, late infancy supplementation of probiotics prevents eczema, and milk oral immunotherapy is effective in the long term

The editorial team of *Pediatric Allergy and Immunology* and myself welcome you to this new edition of the journal. Educational publications open the issue: In the first, Hagen Ott reviews the various clinical conditions related to erythroderma in neonates and infants; allergists are used to linking this clinical sign to atopic dermatitis, but nevertheless should be well aware of other, less frequent diagnoses.¹ Also often presenting with a skin rash, drug allergy is the theme of the second review: Marina Atanaskovic-Markovic et al have in the frame of an EAACI task force reviewed the diagnosis and management of drug-induced anaphylaxis.² The topic of the third review relates to another major focus of the journal, primary immunodeficiencies, with Parisa Amirifar et al³ reviewing ataxia-telangiectasia. The publication nicely combines clinical features of the disease with the most recent discoveries on the pathogenesis and its implication for the diagnosis.



Olympia Tsilochristou

As usual, I would like to highlight several articles in this issue: In my first choice, Olympia Tsilochristou et al have investigated a cohort of children with "local allergic" rhinitis.⁴ When systematically testing the children with chronic, difficult-to-treat, perennial or seasonal rhinitis but without evidence of sensitization to aeroallergens, they found 29.2% of children reacting to a nasal provocation test to one of the most relevant allergens in their area (*Phleum pratense*, *Olea europaea*, *Alternaria alternata*, or *Dermatophagoides pteronyssinus*). This study shows that allergies are probably largely underdiagnosed in chronic rhinitis patients who are often dismissed as non-allergic on the basis only of negative testing. Readers will also be interested by a recent review on allergic rhinitis recently published in the journal which addresses the disease not only for its diagnostic and therapeutic aspects, but also rhinitis in the context of genetic and environmental factors.⁵



Rikke Meineche Schmidt

The second of my highlighted articles in this issue, Rikke Meineche Schmidt and a team from Odense Denmark report of an interventional trial investigating the protective role of a mixture of *Lactococcus rhamnosus* administered daily for prevention of allergic diseases.⁶ The authors hypothesized that administering the probiotic in late infancy (the mean age at enrollment of this six-month trial was 10 months) would be also effective. The number of subjects investigated was close to 300, divided randomly in a placebo and an active arm. Similarly to earlier trials where probiotics were given earlier in life,⁷ the preventive effect was on atopic eczema, with here an incidence of 4.2% in the active and 11.5% in the placebo groups. No effect on sensitization rates, asthma, and conjunctivitis was observed. Immunomodulation by probiotics is a well-investigated topic, which is regularly published in PAI. Within the most recent publications, Marlow et al found that specific Toll-like receptor genetic variations were associated to protection by two strains (*Lactobacillus rhamnosus* HN001 and *Bifidobacterium lactis* HN019), suggesting that individual genetic factors might influence protection by the bacterial environment.⁸ Further, Lundelin et al⁹ have shown the long-term safety of four different strains of probiotics and that the perinatal administration of *Lactococcus rhamnosus* GG may contribute to the reduction of allergic diseases in children aged 10 years and older. The clinical effect of allergy prevention by *Lactobacillus rhamnosus* GG has also been confirmed in an animal trial with subsequently decreased sensitization to a common milk allergen.¹⁰



Tiina Kaisa Kauppila

The third article to highlight is by Tiina Kauppila et al,¹¹ who investigated the safety and efficacy of long-term milk oral immunotherapy in a cohort of Finnish children with persistent cow's milk allergy. Data in 83% of the initial cohort were gathered at the long-term follow-up visits (median 6.5 years). 56% of the children were able to consume over 2 dL of milk daily, an amount which was defining the success group. Identified risk factors for treatment failure were digestive or respiratory symptoms during the buildup phase and reported events of anaphylaxis. Oral symptoms or cutaneous symptoms did not predict treatment failure. Also, high cow's milk-specific IgE at baseline were predicting treatment failures. Oral immunotherapy remains a much-debated topic in PAI,¹²⁻¹⁴ with a clear influence on the patient's quality of life.¹⁵

All further articles in this issue also deserve your attention, and we hope you will find them stimulating to nurture your research and clinical practice.

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