Food Allergy in Adults

Akademisk avhandling

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Avhandlingen baseras på följande delarbeten:

I. **Rentzos G**, Lundberg V, Stotzer P-O, Pullerits T, Telemo E.

Intestinal allergic inflammation in birch pollen allergic patients in relation to pollen season, IgE sensitization profile and gastrointestinal symptoms.

Clinical and Translational Allergy 2014, 4:19

II. **Rentzos G**, Lundberg V, Lundqvist C, Rodrigues R, van Odijk J, Lundell A-C, Pullerits T. Telemo E.

Diagnosis of peanut allergy with basophil activation test in adults.
Submitted for publication

III. **Rentzos G,** Johanson L, Sjölander S, Telemo E, Ekerljung L.

Self-reported adverse reactions and IgE sensitization to common foods in adults with asthma.
Submitted for publication

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Abstract

The knowledge on adverse reactions to foods and the spectrum of food-related gastrointestinal symptoms in relation to allergy in adults is still scarce. The conventional allergy tests do not always offer with precision an accurate diagnosis in case of suspicious food allergy and therefore patients often need to be investigated further with oral food challenge or even intestinal biopsy.

Adult patients with pollen allergy with and without gastrointestinal symptoms were investigated with intestinal biopsies during and outside the birch pollen season for exploring the pattern of mucosal allergic inflammation.
Patients with severe allergy and subjects sensitized to peanuts were investigated with the basophil activation tests in terms of assessing the use of this new diagnostic tool in case of food allergy in adults.
The prevalence of adverse reactions to different foods and the prevalence for food-related gastrointestinal symptoms along with the IgE-sensitization profile for the most common foods were determined among adults with asthma as part of the larger West Sweden Asthma Study.

Interestingly, the results show that adults allergic to birch pollen, present prominent intestinal allergic inflammation during the birch pollen season, and for the first time, clear signs of ongoing season-related intestinal allergic inflammation is revealed, in adults without any gastrointestinal symptomatology.
The basophil activation test may be used as complementary diagnostic tool in case of severe peanut allergy, and for discriminating these patients from peanut sensitized subjects.
The novelty of the last study was that the prevalence for self-reported adverse reactions, and gastrointestinal symptoms to foods, is much higher among asthmatics compared to non-asthmatics. Furthermore asthmatics were significantly more often sensitized to birch related food items, and hazelnut was the food that adults with asthma most commonly experienced adverse reactions to.

Keywords: intestinal allergy, birch pollen, basophil activation test, peanut allergy, prevalence, asthma

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