



POSTER PRESENTATION

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Correlations between in vivo and in vitro tests with commercial extracts and fresh foods and specific IgE, in children with food allergy

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Background

The incidence of food allergy in children seems to be approximately 6 to 8% in developed countries. The diagnosis of food allergy has to be confirmed by skin test, by performing specific IgE and by food challenge.

Aim

The aim of this study was to assess the correlations between results obtained with skin prick tests (SPT) using commercial extracts and prick-prick test (PPT) with fresh food, and the correlations between these results and those obtained with specific IgE.

Methods

We performed a retrospective review of 249 children referred to the University Children's Hospital of Belgrade for assessment of food allergy (cow's milk, hen eggs, wheat, peanuts, soybeans and kiwi) between 2008 and 2010. Children underwent cutaneous (SPT, PPT), serologic (Specific IgE) diagnostic and provocative test with commercially available allergen reagents and extracts.

Results

132 (53%) SPT were assessed as being positive: 33 (47.8%) for CMP, 29 (51.7%) for egg white, 25 (44.6%) for egg yolk, 21 (47.7%) for peanuts, 11 (39.2%) for wheat, 9 (33.4%) for soybeans, 4 (16%) for kiwi. 211 (85%) PPT were assessed as being positive: 50 (72.5%) for CMP, 41 (73.2%) for egg white, 37 (66.07%) for egg yolk, 27 (61.4%) for peanuts, 21 (75%) for wheat, 16 (59.25%) for soybeans, 19 (76%) for kiwi. Specific IgE levels were being positive in 228 (91.5%) children. The

conformable between a positive SPT and serum measurement specific IgE was 57.8% and the conformable between positive PPT and serum measurement specific IgE was 92.5%.

Conclusion

Fresh food extracts are more effective in detecting sensitization. We obtained better conformable between fresh food tests and specific IgE, than with commercial extracts and measurement specific IgE.

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