



URTICARIA, ANGIOEDEMA

DIAGNOSTIC UTILITY OF FOOD-SPECIFIC IGG4 IN CHRONIC URTICARIA WITH SUSPECTED FOOD INTOLERANCE

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Background: Testing for food-specific IgG4 can be a valuable diagnostic method especially for patients with chronic urticaria and suspected delayed food hypersensitivity, who have consistently shown negative results in routine methods to diagnose food allergy.

Objective: To assess the diagnostic utility of food-specific IgG4 in patients with chronic urticaria due to suspected food intolerance, and to evaluate the effect of a food elimination diet based on the food-specific IgG4 findings in improvement of urticarial symptom.

Materials and Methods: Baseline Urticaria Severity Score (USS), Urticaria Activity Score 7 (UAS7), food-specific serum IgG4 assays, and serum cytokine measurement were analyzed in a total of 41 patients with chronic urticaria suspected of harboring food intolerance. After an elimination diet by avoiding food items based on the food-specific IgG4 findings for 4 weeks, USS and UAS7 were reassessed.

Results: Of the 41 patients, 35 patients had food-specific IgG4. After the 4-week food elimination diet period, the mean USS and UAS7 were decreased from that at baseline, from 12.2 and 18.4 to 9.4 and 11.6, respectively. Twenty patients (48.8%) who showed a decrease of >30% in both the USS and UAS7 were classified as the improvement group. The number of food-specific allergens against which IgG4 was secreted (nIgG4) was higher in the improvement group than no improvement group. The nIgG4 was found to be associated with the systemic symptoms of the USS and also identified as a prognostic factor in improvement of urticarial severity score.

Conclusion: This study suggests evidence of the diagnostic utility of food-specific IgG4 to identify the aggravating factor in cases of chronic urticaria with suspected food intolerance.

