

Time to reconsider the clinical value of immunoglobulin G4 to foods?

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BACKGROUND: The usefulness of serum antibodies to common food antigens (immunoglobulin G4; IgG4) assay in management of patients suffering from food intolerance was assessed. **METHODS:** A total of 22 asymptomatic healthy subjects and 68 patients with symptoms referred for suspected food intolerance were studied. Serum IgG4 to 19 common foods was measured by an automated immunoassay. **RESULTS:** The area under the receiver operating characteristic curve was 0.92 (standard error 0.04) and, at a threshold value of 2.3 U/mL, the IgG4 determination had a sensitivity of 0.81, with a specificity of 0.87. With a pre-test probability of 5% and 20%, the post-test probability of having disease was found to be 24% and 61%, respectively, and 1.1% and 5% if the result was negative. Cohen's K value (0.83) indicated a good agreement between symptoms and IgG4 concentrations. **CONCLUSION:** Serum IgG4 assay may play a role in ruling out food intolerance, because of its satisfactory negative predictive value (0.99).