

CONCLUSIONS. Although the predictive capacity of the APT is improved when combined with sIgE measurement or the SPT, oral food challenges become superfluous in only 0.5% to 14.0% of study patients. In addition, the APT is time-consuming and demands a highly experienced test evaluator. For daily clinical practice, the APT adds only a small predictive value to the standard SPT and sIgE measurement in the diagnostic workup of suspected food-related symptoms in children with atopic dermatitis.

REVIEWER COMMENTS. The APT is presumed to reflect late-phase clinical reactions. However, even with late onset of symptoms (>2 hours after food ingestion), the performance of the APT was not consistent in the children with atopic dermatitis. The question that remains unanswered is whether the APT could be used to diagnose non-IgE-mediated gastrointestinal reactions to foods, such as allergic eosinophilic esophagitis/gastroenteritis or food protein-induced enterocolitis syndrome.

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Atopy Patch Test for the Diagnosis of Food Protein-Induced Enterocolitis Syndrome

Fogg MI, Brown-Whitehorn TA, Pawlowski NA, Spergel JM. *Pediatr Allergy Immunol.* 2006;17:351–355

PURPOSE OF THE STUDY. This prospective study was undertaken to determine if the atopy patch test (APT) is able to predict the results of the oral food challenge (OFC) for food protein-induced enterocolitis syndrome (FPIES). The APT involves placement of food in a Finn chamber (metal cap) left on the skin for 48 hours and evaluated for rash in the subsequent days after removal.

STUDY POPULATION. Nineteen patients aged 5 to 30 months who had suspected FPIES on the basis of clinical history.

METHODS. The infants underwent APT to the suspected foods. After APT was performed, the subjects underwent OFC to determine if FPIES was present. The results of APT and OFC were compared and used to calculate sensitivity and specificity of the APT.

RESULTS. APT predicted the results of OFCs in 28 of 33 instances. There were 16 cases of FPIES confirmed by OFCs. In all 16 cases of FPIES, the APT result was positive to the suspected food. However, the APT was positive in 5 instances in which the OFC result was negative. All 12 patients with a negative APT result had a negative OFC result to the suspected food.

CONCLUSIONS. APT seems to be a promising diagnostic tool for the diagnosis of FPIES.

REVIEWER COMMENTS. FPIES is a non-immunoglobulin E (IgE)-mediated food allergy in which affected infants

develop gastrointestinal symptoms hours after ingestion of the offending food. Current allergy skin and serum tests are not useful for diagnosing this disorder, because they test for food-specific IgE levels that are often negative in FPIES. A diagnostic OFC is the gold standard. The role for APT in diagnosing other non-IgE-mediated food hypersensitivities has been investigated. The results of this study suggest that APT may have some utility in guiding the diagnosis and management of FPIES.

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Allergic Eosinophilic Gastroenteritis With Protein-Losing Enteropathy: Intestinal Pathology, Clinical Course, and Long-term Follow-up

Chehade M, Magid MS, Mofidi S, Nowak-Wegrzyn A, Sampson HA, Sicherer SH. *J Pediatr Gastroenterol Nutr.* 2006;42:516–521

PURPOSE OF THE STUDY. To identify gross and/or histologic distinguishing features of antral and duodenal biopsy specimens as well as clinical response to various treatment regimens in the subset of patients with eosinophilic gastroenteritis (AEG) with protein-losing enteropathy (PLE).

STUDY POPULATION. The experimental group consisted of 6 children with anemia and hypoalbuminemia and biopsy-proven AEG identified retrospectively from a series of 93 patients with AEG who were evaluated at Mount Sinai Medical Center (New York, NY) over a 7.5-year period.

METHODS. Two comparison groups were used in addition to the experimental group. The first included 6 randomly selected patients from the series of 93 patients with AEG without anemia and/or hypoalbuminemia. The second comparison group included 5 patients who presented with symptoms consistent with possible AEG yet normal gross findings and histology after endoscopy. Causes of eosinophilia other than AEG were ruled out. The diagnoses of AEG required the presence of >20 eosinophils per high-power field in antral biopsy specimens and >50 in the duodenum. Hematoxylin/eosin staining and immunohistochemical staining of tryptase were used for identification of eosinophils and mast cells, respectively. The cell count was taken from the high-power field with maximum infiltration.

RESULTS. Various therapies were attempted in the experimental group including oral corticosteroids, cromolyn sodium, 6-mercaptopurine, food-elimination diets, and montelukast. They were, at best, partially or temporarily beneficial. All experimental patients received an exclusive amino acid-based formula diet at some point in their care; this formula was associated with rapid im-

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