

Selections from international journals

Nahla M. Heshmat

Professor of Pediatrics, Ain Shams University

Pediatr Allergy Immunol. 2017;28(1):60-70.

The European Survey on Adverse Systemic Reactions in Allergen Immunotherapy (EASSI): A paediatric assessment.

Rodríguez Del Río P, Vidal C, Just J, Tabar AI, Sanchez-Machin I, Eberle P, Borja J, Bubel P, Pfaar O, Demoly P, Calderón MA.

BACKGROUND: Safety data on 'real-life' allergen immunotherapy (AIT) in children and adolescents is usually extrapolated from studies in adults. **METHODS:** Patients aged 18 or under initiating aeroallergen AIT were evaluated in a prospective European survey. Patient profiles and systemic reactions (SRs) were recorded. Descriptive, univariate and multivariate analyses were used to identify risk factors for SRs. **RESULTS:** A total of 1563 patients (mean \pm SD age: 11.7 \pm 3.9 years; rhinitis: 93.7%; asthma: 61.5%; polysensitization: 62.5%) and 1578 courses of AIT were assessed. Single-allergen AIT was administered in 89.5% of cases (n = 1412; mites: 49%; grass pollen: 25.8%; tree pollen: 8.7%; Alternaria: 4.6%; dander: 0.8%; weed pollen: 0.6%). Subcutaneous AIT (SCIT) was used in 71.4% (n = 1127) of the treatments, including 574 (50.9%) with natural extracts. Sublingual AIT (SLIT) was used for the remaining 451 treatments (drops: 73.8%; tablets: 26.2%). The mean \pm SD follow-up period was 12.9 \pm 3.3 months. The estimated total number of doses was 19,669 for SCIT and 131,550 for SLIT. Twenty-four patients (1.53%) experienced 29 SRs. Respiratory (55.7%) and skin symptoms (37.9%) were most frequent. Anaphylaxis was diagnosed in 3 SRs (10.3%), and adrenaline was administered in 2 of these cases. In a univariate analysis, the risk of SRs was lower in mite-sensitized patients and higher in cases of pollen polysensitization (>3), grass pollen extracts and the use of natural extracts (vs. allergoids). **CONCLUSIONS:** In a real-life paediatric setting, AIT is safe. SRs are infrequent and generally not severe. Pollen polysensitization, grass pollen extracts and natural extracts (vs. allergoids) were risk factors for AIT-associated SRs.

J Rheumatol. 2017;44(1):110-116.

Childhood Arthritis and Rheumatology Research Alliance Consensus Clinical Treatment Plans for Juvenile Dermatomyositis with Persistent Skin Rash.

Huber AM, Kim S, Reed AM, Carrasco R, Feldman BM, Hong SD, Kahn P, Rahimi H, Robinson AB, Vehe RK, Weiss JE, Spencer C; Juvenile Dermatomyositis Research Committee of the Childhood Arthritis and Rheumatology Research Alliance.

OBJECTIVE: Juvenile dermatomyositis (JDM) is the most common form of idiopathic inflammatory myopathy in children. While outcomes are generally thought to be good, persistence of skin rash is a common problem. The goal of this study was to describe the development of clinical treatment plans (CTP) for children with JDM characterized by persistent skin rash despite complete resolution of muscle involvement. **METHODS:** The Childhood Arthritis and Rheumatology Research Alliance, a North American consortium of pediatric rheumatologists and other healthcare providers, used a combination of Delphi surveys and nominal group consensus meetings to develop CTP that reflected consensus on typical treatments for patients with JDM with persistent skin rash. **RESULTS:** Consensus was reached on patient characteristics and outcome assessment. Patients should have previously received corticosteroids and methotrexate (MTX). Three consensus treatment plans were developed. Plan A added intravenous immunoglobulin (IVIG) if it was not already being used. Plan B added mycophenolate mofetil, while Plan C added cyclosporine. Continuation of previous treatments, including corticosteroids, MTX, and IVIG, was permitted in plans B and C.

CONCLUSION: Three consensus CTP were developed for use in children with JDM and persistent skin rash despite complete resolution of muscle disease. These CTP reflect typical treatment approaches and are not to be considered treatment recommendations or standard of care. Using prospective data collection and statistical methods to account for nonrandom treatment assignment, it is expected that these CTP will be used to allow treatment comparisons, and ultimately determine the best treatment for these patients.

J Allergy Clin Immunol. 2017;139(1):29-44.

Addendum guidelines for the prevention of peanut allergy in the United States: Report of the National Institute of Allergy and Infectious Diseases-sponsored expert panel.

Togias A, Cooper SF, Acebal ML, Assa'ad A, Baker JR, Beck LA, Block J, Byrd-Bredbenner C, Chan ES, Eichenfield LF, Fleischer DM, Fuchs GJ 3rd, Furuta GT, Greenhawt MJ, Gupta RS, Habich M, Jones SM, Keaton K, Muraro A, Plaut M, Rosenwasser LJ, Rotrosen D, Sampson HA, Schneider LC, Sicherer SH, Sidbury R, Spergel J, Stukus DR, Venter C, Boyce JA.

BACKGROUND: Food allergy is an important public health problem because it affects children and adults, can be severe and even life-threatening, and may be increasing in prevalence. Beginning in 2008, the National Institute of Allergy and Infectious Diseases, working with other organizations and advocacy groups, led the development of the first clinical guidelines for the diagnosis and management of food allergy. A recent landmark clinical trial and other emerging data suggest that peanut allergy can be prevented through introduction of peanut-containing foods beginning in infancy. **OBJECTIVES:** Prompted by these findings, along with 25 professional organizations, federal agencies, and patient advocacy groups, the National Institute of Allergy and Infectious Diseases facilitated development of addendum guidelines to specifically address the prevention of peanut allergy. **RESULTS:** The addendum provides 3 separate guidelines for infants at various risk levels for the development of peanut allergy and is intended for use by a wide variety of health care providers. Topics addressed include the definition of risk categories, appropriate use of testing (specific IgE measurement, skin prick tests, and oral food challenges), and the timing and approaches for introduction of peanut-containing foods in the health care provider's office or at home. The addendum guidelines provide the background, rationale, and strength of evidence for each recommendation. **CONCLUSIONS:** Guidelines have been developed for early introduction of peanut-containing foods into the diets of infants at various risk levels for peanut allergy.

Ann Allergy Asthma Immunol. 2017;118(2):133-142.

Asthma Yardstick: Practical recommendations for a sustained step-up in asthma therapy for poorly controlled asthma.

Chippis BE, Corren J, Israel E, Katial R, Lang DM, Panettieri RA Jr, Peters SP, Farrar JR.

Current asthma guidelines recommend a control-based approach to management that involves assessment of impairment and risk followed by implementation of treatment strategies individualized according to the patient's needs and preferences. The fact that many patients still experience severe symptoms that negatively affect quality of life suggests that asthma control remains an objective to be achieved. Tools are available to help patients (and families) manage the day-to-day and short-term variability in asthma symptoms; however, when and how to implement a sustained step-up in therapy is less clear. The Asthma Yardstick is a comprehensive update on how to conduct a sustained step-up in asthma therapy for the patient with not well-controlled or poorly controlled asthma. Patient profiles and step-up strategies are based on current guidelines, newer data, and the authors' combined clinical experience and are intended to provide a practical and clinically meaningful guide toward the goal of well-controlled asthma for every patient. The development of this tool comes in response to the continued need to proactively address the sustained loss of asthma control at all levels of severity.