immunotherapy: A 6-year follow-up study


Purpose of the Study. Prevalence of atopic diseases has increased in westernized countries despite current prevention strategies. The objective of this study was to determine whether specific immunotherapy (IT) can stop progression of sensitization to additional environmental allergens in children monosensitized to house dust mites.

Study Population. One hundred thirty-four children ages 5 to 8 years, with intermittent asthma, with or without rhinitis, sensitized to house dust mites.

Methods. Children were evaluated by prick skin testing and measurement of serum allergen-specific immunoglobulin E (IgE). Parents of 75 children accepted IT and these children were received IT with dust mite extract for 3 years. The remaining 63 children were treated with medication and were considered a control group. All children were skin tested and had serum allergen-IgE measured every year for 6 years.

Results. Both groups were comparable in regard to age, sex, and presence of rhinitis. At the end of the 6-year study period, 25% of patients in the IT group showed no sensitization(s), compared with 66% in the control group (P < .0002). The most frequent new sensitizations were pollens, animal danders, and Alternaria mold. The IT was well-tolerated.

Conclusion. Specific IT may prevent the development of new sensitizations in children with asthma, with or without rhinitis, monosensitized to house dust mites.

Reviewer’s Comments. This nonrandomized clinical trial highlights the renewed interest in immunotherapy because of its potential to modify the natural history of atopic sensitization. If subsequent studies confirm the results of this trial, our standard of care may change to recommend the use of immunotherapy as a second- or third-line treatment.

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The Upper Airway

Superiority of an Intranasal Corticosteroid Compared with an Oral Antihistamine in the As-Needed Treatment of Seasonal Allergic Rhinitis


Purpose. The daily use of either intranasal corticosteroids or histamine 1 (H1) receptor antagonists has proved to be efficacious in the treatment of seasonal allergic rhinitis. Most patients, however, use these medications as needed. Our objective was to compare the effectiveness of as-needed use of H1 receptor antagonists with that of intranasal corticosteroids in the treatment of seasonal allergic rhinitis.

Study Population and Methods. We performed a randomized, open-label, parallel-group study comparing the as-needed use of an H1 receptor antagonist (loratadine) that of an intranasal corticosteroid (fluticasone propionate) in the management of fall seasonal allergic rhinitis in the fall of 1999. Subjects kept a diary of their daily symptoms and were examined at enrollment into the study and biweekly for 4 weeks during treatment. Outcome measures were the Rhinoconjunctivitis Quality of Life Questionnaire score, daily symptom diary scores, and the number of eosinophils and the levels of eosinophilic cationic protein in nasal lavage samples.

Results. Patients in the fluticasone-treated group reported significantly better scores in the activity, sleep, practical, nasal, and overall domains (P < .05) of the Rhinoconjunctivitis Quality of Life Questionnaire. The median total symptom score in the fluticasone-treated group was significantly lower than that in the loratadine-treated group (4.0 vs 7.0; P < .01). After treatment, the number of eosinophils was significantly smaller in the fluticasone-treated group compared with the loratadine-treated group (P = .001). Eosinophilic cationic protein levels followed the same pattern, with a significant correlation between the levels of eosinophilic cationic protein and the number of eosinophils (Rs = 0.70; P < .01).

Conclusion. As-needed intranasal corticosteroids reduce allergic inflammation and are more effective than as-needed H1 receptor antagonists in the treatment of seasonal allergic rhinitis.

Reviewer’s Comments. What would a study from this group be without nasal wash data? Everybody knows that most patients don’t use their allergy medicines just the way we tell them to. The results of this study are reassuring that patients can do well just by using their nasal corticosteroids as needed. I usually count on the fact that by instructing daily use of medications, most folks will use them every 2 or 3 days. If we suggest that patients use medications less frequently than that, they may not use them at all.

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Risk of Adenoid Hypertrophy in Children with Allergic Rhinitis


Purpose of the Study. To determine the risk factor of adenoidal hypertrophy in patients with known allergic rhinitis (AR).

Study Population. Three hundred fifteen consecutive patients between the age of 1 and 18 years with a diagnosis of AR who were also found to have adenoid hypertrophy (AH). A control group of 315 similarly aged patients with AR and no evidence of AH were randomly selected.

Methods. This was a retrospective study reviewing patients seen in the allergy clinic at a University Medical Center in Florida over a 10-year period. AR was diagnosed by history, physical findings, and positive skin test results. AH was determined radiographically defined as a narrowing of the airway attributable to adenoid mass by as much...
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