are increasing. In this study, allergic reactions to peanuts and tree nuts were the most common cause of anaphylaxis and the most common reason for recurrence, but other foods, such as eggs, fruits, vegetables, wheat, fish, and shellfish, were also common triggers. Compliance with the use of self-injectable epinephrine was only 50%. Because of the high risk of recurrence, each anaphylactic event should be reviewed and patients should be reeducated regarding trigger avoidance, recognition of symptoms, and use of epinephrine.

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LACK OF EFFECT OF FLUTICASONE PROPIONATE AQUEOUS NASAL SPRAY ON THE HYPOTHALAMIC-PITUITARY-ADRENAL AXIS IN 2- AND 3-YEAR-OLD PATIENTS


Purpose of the Study. To determine the effects of fluticasone propionate (FP) (200 μg daily) on the hypothalamic-pituitary-adrenal (HPA) axis among patients 2 to 3 years of age.

Study Population. Children 2 to 3 years of age who demonstrated positive skin test responses to ≥1 seasonal allergen and the presence of nasal symptoms for ≥1 hour daily on most days or the use of rinsitis medication on most days during the relevant allergen exposure season were studied.

Methods. Children were administered FP (200 μg daily) (N = 33) or vehicle placebo (N = 32) for 6 weeks. Twelve-hour urine samples were collected, for determination of urinary cortisol levels, at the end of the 6-week treatment and at baseline. Routine chemical analyses, hematologic assessments, and electrolyte measurements were also performed at screening and at the last treatment visit. The secondary safety measures included the incidence of clinically significant alterations in laboratory test results, in the case of adverse effects.

Results. There were no differences in urinary cortisol levels between the children who received FP and those who received placebo. The most common adverse events reported for either group were cough and fever. Vomiting was observed more frequently for the FP group (18% vs 3%), as was abdominal pain (12% vs 6%) and epistaxis (6% vs 0%). However, there were no statistically significant differences in any of these findings.

Conclusions. FP (200 μg/day) was equivalent to placebo with respect to its effects on HPA axis function, as determined by 12-hour urinary free cortisol levels, among 2- to 3-year-old children. FP was otherwise well tolerated by these 2- to 3-year-old children with allergic rhinitis.

Comment. At this juncture, FP nasal spray appears to be safe, in terms of HPA axis suppression, among young children.

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Efficacy of the Topical Nasal Steroid Budesonide on Improving Sleep and Daytime Somnolence in Patients with Perennial Allergic Rhinitis


Purpose of the Study. To determine the efficacy of topical nasal corticosteroids in the improvement of sleep and daytime somnolence among patients with perennial allergic rhinitis (PAR).

Study Population. Twenty-two subjects (18–65 years of age) with positive skin test responses to perennial allergens but not seasonal allergens were enrolled in the study.

Methods. The study was a double-blind, placebo-controlled, crossover study that incorporated Balaam’s design. Patients were randomized to 1 of 4 treatment groups, ie, active-placebo, placebo-active, active-active, or placebo-placebo. Patients received 2 sprays of the active medication (budesonide, 128 μg/day) or placebo once daily for 4 weeks. After a 1-week washout period, patients crossed over to the second arm of the study, according to the randomization sequence. Patients completed daily diaries, commenting on nasal symptoms, sleep, daytime somnolence, quality of sleep, and medication response. At weeks 1, 4, 5, and 8, patients completed subjective questionnaires during clinic visits, to assess quality of life, somnolence, and fatigue.

Results. Analyses of data obtained from the daily diaries showed that patients receiving active medication demonstrated significant improvements in daytime fatigue, somnolence, sleep problems, and quality of life, compared with those receiving placebo. There was no significant difference in nasal congestion or other symptoms of rhinitis between the treatment groups. Patients receiving active medication were significantly less likely to fall asleep during normal daily activities, but there was no difference in the numbers of hours of sleep or nighttime arousals. Those in the active group also had significantly more restorative sleep and reported feeling more refreshed, compared with those receiving placebo.

Conclusions. Patients with PAR who were receiving the topical nasal corticosteroid budesonide demonstrated significant improvements in daytime somnolence, fatigue, and sleep problems.

Comment. Patients with allergic rhinitis frequently complain of nocturnal symptoms, such as nasal congestion and rhinorrhea, that interfere with sleep, and previous studies showed that patients with allergic rhinitis have significantly more difficulty with daytime somnolence and sleep problems. This study offers encouraging data on the usefulness of topically applied nasal corticosteroids in improving sleep-related problems among patients with PAR and provides more evidence supporting the recommendation of topically applied nasal corticosteroids as the primary treatment for allergic rhinitis.

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The Effects of Intranasal Triamcinolone Acetonide and Intranasal Fluticasone Propionate on Short-Term Bone Growth and Hypothalamic-Pituitary-Adrenal Axis in Children with Allergic Rhinitis

Efficacy of the Topical Nasal Steroid Budesonide on Improving Sleep and Daytime Somnolence in Patients with Perennial Allergic Rhinitis

Tamara T. Perry and Robert A. Wood

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