STUDY POPULATION. The study included 855 patients aged 18 to 65 from 55 centers in Canada and Europe with seasonal allergic rhinoconjunctivitis induced by grass pollen.

METHODS. A double-blind, randomized, parallel-group, placebo-controlled trial was conducted during 2002–2003. Patients had a history of allergic rhinoconjunctivitis during grass-pollen season for at least 2 years with a positive skin-prick-test result and serum-specific immunoglobulin E (IgE) to Phleum pratense. Individuals were randomly assigned to receive placebo or 2500, 25 000, or 75 000 SQ-T sublingual tablets administered daily. Daily diaries of symptoms (0–3) and rescue-medication use from pre–through post–grass-pollen season were kept, and a rhinoconjunctivitis quality-of-life (QoL) questionnaire was completed. Well days were calculated as those with a symptom score of ≤2 and no rescue-medication use.

RESULTS. A total of 790 (92%) participants completed the trial that included a mean duration of treatment of 18 weeks. Treatment with 75 000 SQ-T tabs revealed an improvement in symptom score (16%; P = .0010) and medication score (28%; P = .0047) when compared with placebo. The QoL score of number of well days also revealed improvement of 17% (P = .0066) and 18% (P = .0411), respectively. The 2 lower doses did not demonstrate significant change from placebo. Preseason treatment for 8 weeks with the 75 000 SQ-T dose showed an increased improvement of symptom score (21%; P = .0022) and medication score (29%; P = .0012) compared with placebo. In the 75 000 SQ-T group, specific IgG to P pratense was increased after 8 weeks of treatment and tripled posttreatment. Specific IgE levels increased after treatment initially and remained unchanged thereafter. Therapy was well tolerated with only mild-to-moderate symptoms (consisting of primarily oral pruritus and throat irritation) noted in 53% of the patients.

CONCLUSIONS. Grass-pollen SLIT has a dose-dependent efficacy, is well tolerated, and provides improved QoL for patients with seasonal allergic rhinoconjunctivitis.

REVIEWER COMMENTS. SLIT for grass-pollen allergy holds promise as an alternative future therapy to subcutaneous immunotherapy that is attractive on many levels. Grass-pollen SLIT may have broader coverage range because of improved accessibility and more convenient administration, less discomfort than injections, and decreased risk of IgE-mediated severe systemic reactions. Preseason coverage with SLIT may improve symptoms and reduce medication requirements for treatment of seasonal allergic rhinoconjunctivitis.

Clinical Efficacy and Safety of Sublingual Immunotherapy With Tree Pollen Extract in Children


PURPOSE OF THE STUDY. To investigate the clinical efficacy, safety, and dose-response relationship of sublingual immunotherapy (SLIT) in children suffering from rhinoconjunctivitis with or without asthma.

STUDY POPULATION. Eighty-eight children (aged 5–15 years) in Finland with a history of tree-pollen–induced allergic rhinoconjunctivitis with or without seasonal asthma. Skin-prick test, specific immunoglobulin E, and conjunctival provocation test were used to confirm allergy to tree pollen.

METHODS. Randomized, double-blind, placebo-controlled dose-response study using a glycerinated mixture of pollen from birch, hazel, and alder trees. Three groups receiving SLIT 5 days per week for up to 18 months were given an accumulated weekly dose of 24 000 U (dose group 1), an accumulated weekly dose of 200 000 U (dose group 2), or placebo.

RESULTS. In the birch-pollen season, dose group 2 showed a significant reduction in both symptom (P = .01) and medication (P = .04) scores compared with those in the placebo group, but dose group 1 showed only a significant reduction of symptom scores (P = .03). No serious adverse events were reported. Oral local reactions were the most common adverse effect, ranging from 25% of patients in the placebo group to 50% in group 2.

CONCLUSIONS. SLIT with tree-pollen extract provided dose-dependent benefits in tree-pollen–allergic children in terms of significantly reduced symptoms and medication use. The treatment was well tolerated.

REVIEWER COMMENTS. The use of allergen-specific immunotherapy by the sublingual route, SLIT, has been increasing in clinical practice in Europe. SLIT is especially attractive for use in children, because it is a noninjection form of immunotherapy. This study showed a modest reduction (~40%) in both symptom and medication scores. This is an interesting disease-modifying therapy that will need more studies to characterize efficacy and safety and to compare the results to that of subcutaneous immunotherapy before wider use can be recommended.
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