Do allergy shots help seasonal allergies more than antihistamines and nasal steroids?

**EVIDENCE-BASED ANSWER**

Multiple randomized controlled trials (RCTs) demonstrate the effectiveness of both allergen immunotherapy and antihistamines, with or without nasal steroids, in the treatment of seasonal allergic rhinitis (strength of recommendation [SOR]: A). No RCTs directly compare immunotherapy with conservative management. Treatment decisions are driven by the clinical presentation, patient and physician preferences, practice guidelines, and expert opinion (SOR: C, based on expert opinion). In standard practice, immunotherapy is not recommended for most patients with seasonal allergic rhinitis.

**CLINICAL COMMENTARY**

When patients are referred for immunotherapy, it’s important for them to have realistic expectations. The initial process involves weekly visits, and it may take years to gain adequate symptom control. For patients with the commitment, time, and insurance coverage, however, the outcomes can be very positive.

Mary M. Stephens, MD, MPH
East Tennessee State University, Kingsport

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**Evidence summary**

A 2002 Agency for Healthcare Research and Quality systematic review on the diagnosis and treatment of allergic rhinitis found no RCTs comparing antihistamines or nasal corticosteroids with immunotherapy. Our literature review found 4 studies not included in this report that compared immunotherapy with nasal steroids or oral antihistamines. Only 2 of these examined patient-oriented outcomes and both are of poor quality. One study reported that inhaled nasal steroid therapy was superior to a nonstandard immunotherapy for ragweed pollen–induced rhinitis. The second study allowed patients to choose a treatment arm; it found that immunotherapy was superior to treatment with antihistamines and nasal steroids for patients who chose it.

For patients requiring medication, studies comparing antihistamines with
nasal corticosteroids have documented the superiority of intranasal steroids for symptom control of allergic rhinitis.²,⁷

The effectiveness of immunotherapy has been documented in more than 40 placebo-controlled trials. However, the patients involved in these trials were often concurrently treated with allergy medications.⁷ In standard practice, immunotherapy is not recommended for most patients with seasonal allergic rhinitis unless avoidance measures and symptomatic therapy are ineffective, have adverse effects, or are not feasible.⁷ Studies indicate that immunotherapy is effective for several years after treatment is discontinued.¹⁰

A review of recent placebo-controlled trials indicates that the risk of developing asthma among patients with allergic rhinoconjunctivitis is significantly reduced when patients receive specific immunotherapy.¹¹ However, allergy immunotherapy presents risk of systemic reactions, with one study reporting a 0.5% risk of systemic reactions per year of therapy.¹²

**Recommendations from others**
The American College of Allergy, Asthma, and Immunology recommends that effective management of allergic rhinitis may require combinations of medications—antihistamines, decongestants, nasal corticosteroids, and anticholinergic agents as well as aggressive avoidance of rhinitis triggers. Consider allergy immunotherapy in carefully selected patients in consultation with an allergist-immunologist.¹⁰

**REFERENCES**


**FAST TRACK**

For most patients there is an acceptable alternative to allergy shots, with better symptom control and fewer side effects.