AAO–HNSF Releases Guideline on Allergic Rhinitis

Key Points for Practice
- Intranasal steroids and second-generation antihistamines (although less effective than intranasal steroids) are strongly recommended for patients whose symptoms interfere with their quality of life.
- Immunoglobulin E–specific skin or blood testing is recommended when treatment has been ineffective, a diagnosis of allergic rhinitis is uncertain, identification of a certain allergen could affect therapy, or to aid in titration of therapy.
- Combination therapies are an option when intranasal steroids alone do not control allergic symptoms.

From the AFP Editors

Allergic rhinitis is the fifth most common chronic disease in the United States and affects about one in six Americans. The American Academy of Otolaryngology–Head and Neck Surgery Foundation (AAO–HNSF) has released a clinical practice guideline for the purpose of optimizing patient care, promoting effective diagnosis and therapy, and reducing harmful or unnecessary interventions in adults and children with allergic rhinitis.

Diagnosis and Treatment Recommendations

PATIENT HISTORY AND PHYSICAL EXAMINATION
A clinical diagnosis of allergic rhinitis should be made when a patient presents with one or more of the following allergic symptoms: nasal congestion, runny nose, itchy nose, sneezing, or red and watery eyes. It is important for physicians to be able to make an initial diagnosis because therapies for allergic rhinitis may be different from those for non-allergic rhinitis.

ALLERGY TESTING
Immunoglobulin E–specific skin or blood testing is recommended when treatment (e.g., environmental controls, allergen avoidance, medical management) has been ineffective, a diagnosis of allergic rhinitis is uncertain, identification of a certain allergen could affect therapy, or to aid in titration of therapy. Physicians who cannot perform and interpret these tests should refer patients to a physician who is able to do so.

IMAGING
Use of routine diagnostic imaging is not recommended for patients with allergic rhinitis because there are no specific radiologic findings for confirming the diagnosis. The cost and possible adverse effects of imaging outweigh any usefulness. Patients with suspected allergic rhinitis should be diagnosed based on clinical presentation.

CHRONIC CONDITIONS AND COMORBIDITIES
There is a well-established epidemiologic association between allergic rhinitis and atopic disorders, such as asthma, eczema, and conjunctivitis. There also may be an association between allergic rhinitis and otitis media, rhinosinusitis, and sleep-disordered breathing. The presence of any of these conditions should be documented in the patient’s medical record; identification is important for treatment optimization.

INTRANASAL STEROIDS
Based on their effectiveness, superiority over other therapies, and a good safety record, intranasal steroids are strongly recommended for patients whose symptoms interfere with their quality of life. Intranasal steroids reduce sneezing, itching, rhinorrhea, and congestion, and have beneficial effects on allergic eye symptoms. Treatment is best initiated several days before the pollen season in patients with known seasonal allergic rhinitis.

ORAL ANTIHISTAMINES
Second-generation, less sedating oral antihistamines are strongly recommended for patients with allergic rhinitis and primary symptoms of sneezing and itching. Although they are less effective than intranasal steroids,
Practice Guidelines

the anti-inflammatory effect of oral antihistamines provides adequate symptom relief for many patients with mild to moderate symptoms. They have the advantage of lower cost, rapid onset of action, and effectiveness for intermittent symptoms.

IMMUNOTHERAPY

Immunotherapy (sublingual or subcutaneous) should be offered to patients with allergic rhinitis, or patients should be referred to a physician who can offer it. Indications for immunotherapy include symptoms that have not improved with pharmacologic therapy, patient preference, and possible prevention of asthma. Both types of immunotherapy have been shown to be effective in reducing allergic symptoms, but there is potential for local or systemic adverse events.

ENVIRONMENTAL FACTORS

Allergen avoidance measures may improve health outcomes for patients with allergic rhinitis. Physicians may advise environmental controls such as removing pets from the home, the use of air filtration systems, bed covers, and acaricides (chemical agent that kills dust mites). These measures focus on limiting exposure to allergens that trigger symptoms and reducing medication use.

INTRANASAL ANTIHISTAMINES

Intranasal antihistamines are another option for patients with seasonal, perennial, or episodic allergic rhinitis. One of the benefits is targeted delivery and increased dosage to nasal tissues. Intranasal antihistamines have been shown to be equal or superior to oral antihistamines for nasal symptoms. If oral antihistamine treatment is ineffective, patients may benefit from using intranasal antihistamines. Adverse effects associated with intranasal antihistamine use include bitter taste, epistaxis, headache, somnolence, and nasal burning.

COMBINATION THERAPY

Intranasal Steroids and Oral Antihistamines. When there is incomplete control or no response to intranasal steroids, the addition of oral antihistamines is ineffective.

Oral Antihistamines and Oral Decongestants. This combination controls allergic rhinitis symptoms better than oral antihistamines or oral decongestants alone. However, adding an oral decongestant to an antihistamine increases adverse effects and there is a potential for tolerance from long-term use.

Oral Antihistamines and Leukotriene Receptor Antagonists. There is conflicting evidence that this combination is superior to either medication used alone and is not recommended.

Intranasal Steroids and Leukotriene Receptor Antagonists. Leukotriene receptor antagonists should not be used routinely as additive therapy for patients using intranasal steroids.

Intranasal Steroids and Intranasal Antihistamines. This combination is most effective for patients who tolerate either intranasal steroid or intranasal antihistamine monotherapy, but have insufficient control of allergic symptoms.

Intranasal Steroids and Intranasal Oxymetazoline (Afrin). This combination controls allergic symptoms more effectively than either.
Practice Guidelines

therapy alone. To avoid risk of rhinitis medicamentosa, use should be limited to fewer than three days.

**INFERIOR TURBINATE REDUCTION**

Surgical options are available for patients who have persistent nasal symptoms and turbinate hypertrophy despite medical treatment. Surgery involves different methods for removing portions of the turbinate (turbinectomy); the tissues between the mucosal covering, the bone of the turbinate, or both (submucous resection); or shrinking the volume of the turbinate (tissue ablation). These procedures are generally safe, but primary medical management is recommended as the initial treatment for allergic rhinitis.

**ACUPUNCTURE**

For patients interested in nonpharmacologic therapies, physicians may suggest acupuncture. Studies have shown that acupuncture offers some symptom relief and improved quality of life in patients with perennial allergic rhinitis. There is no evidence of any significant harms.

**HERBAL THERAPY**

There is no recommendation for using herbal therapy for patients with allergic rhinitis.

**LEUKOTRIENE RECEPTOR ANTAGONISTS**

Leukotriene receptor antagonists are less effective and more expensive than other treatments and should not be used as a first-line treatment of allergic rhinitis.

*Guideline source:* American Academy of Otolaryngology–Head and Neck Surgery Foundation

*Evidence rating system used?* Yes

*Literature search described?* Yes

*Guideline developed by participants without relevant financial ties to industry?* No

*Published source:* Otolaryngol Head Neck Surg. February 2015;152(suppl 1):S1-S43

*Available at:* http://oto.sagepub.com/content/152/1_suppl/S1.full

**JENNIFER WILKES, AFP Editorial Coordinator**