Allergy Rhinitis

Rhinitis, which occurs most commonly as allergic rhinitis, is an inflammation of the nasal membranes that is characterized by sneezing, nasal congestion, nasal itching, and rhinorrhea, in any combination. Although allergic rhinitis itself is not life-threatening (unless accompanied by severe asthma or anaphylaxis), morbidity from the condition can be significant.
Essential update: New recommendations for treating allergic rhinitis released

The American Academy of Otolaryngology-Head and Neck Surgery Foundation has released new guidelines for treating patients ages 2 and up who suffer from allergic rhinitis.[7]

Key recommendations include the following:

- For patients with a stuffy nose, nasal passage discoloration, and/or red and watery eyes, doctors should forgo sinus imaging process in favor of specific immunoglobulin E screening. Sinonasal imaging exposes patients to unnecessary radiation.
- Intranasal steroids and oral antihistamines are recommended as first lines of treatment. Oral leukotriene receptor antagonists are not.
- Sublingual or subcutaneous immunotherapy should be offered to patients who do not respond to pharmacologic therapy.
- Acupuncture is an option for patients who do not wish to take meds.

Signs and Symptoms

*Signs and symptoms of allergic rhinitis include the following:*

- Sneezing
- Itching: Nose, eyes, ears, palate
- Rhinorrhea
- Postnasal drip
- Congestion
- Anosmia
- Headache
- Earache
- Tearing
- Red eyes
- Eye swelling
- Fatigue
- Drowsiness
- Malaise

*Complications of this allergic rhinitis include the following:*

- Acute or chronic sinusitis
- Otitis media
- Sleep disturbance or apnea
- Dental problems (overbite): Caused by excessive breathing through the mouth
- Palatal abnormalities
- Eustachian tube dysfunction
Physical examination

Nasal features of allergic rhinitis can include the following:

- Nasal crease: A horizontal crease across the lower half of the bridge of the nose; caused by repeated upward rubbing of the tip of the nose by the palm of the hand
- Thin, watery nasal secretions
- Deviation or perforation of the nasal septum: May be associated with chronic rhinitis, although there can be other, unrelated causes
- Manifestations of allergic rhinitis affecting the ears, eyes, and oropharynx include the following:
  - Ears: Retraction and abnormal flexibility of the tympanic membrane
  - Eyes: Injection and swelling of the palpebral conjunctivae, with excess tear production; Dennie-Morgan lines (prominent creases below the inferior eyelid); and dark circles around the eyes (“allergic shiners”), which are related to vasodilation or nasal congestion
  - Oropharynx: “Cobblestoning,” that is, streaks of lymphoid tissue on the posterior pharynx; tonsillar hypertrophy; and malocclusion (overbite) and a high-arched palate

See Clinical Presentation for more detail.

Diagnosis

Laboratory tests used in the diagnosis of allergic rhinitis include the following:

- Allergy skin tests (immediate hypersensitivity testing): An in vivo method of determining immediate (IgE-mediated) hypersensitivity to specific allergens
- Radioallergosorbent test (RAST): Indirectly measures the quantity of immunoglobulin E (IgE) serving as an antibody to a particular antigen
- Total serum IgE: Neither sensitive nor specific for allergic rhinitis, but the results can be helpful in some cases when combined with other factors
- Total blood eosinophil count: Neither sensitive nor specific for the diagnosis, but, as with total serum IgE, can sometimes be helpful when combined with other factors
- Imaging studies used in the diagnosis and evaluation of allergic rhinitis include the following:
  - Radiography: Can be helpful for evaluating possible structural abnormalities or to help detect complications or comorbid conditions, such as sinusitis or adenoid hypertrophy
  - Computed tomography scanning: Can be very helpful for evaluating acute or chronic sinusitis
  - Magnetic resonance imaging: Also can be helpful for evaluating sinusitis

See Workup for more detail.
Management

The management of allergic rhinitis consists of the following 3 major treatment strategies:

- Environmental control measures and allergen avoidance: These include keeping exposure to allergens such as pollen, dust mites, and mold to a minimum.
- Pharmacologic management: Patients are often successfully treated with oral antihistamines, decongestants, or both; regular use of an intranasal steroid spray may be more appropriate for patients with chronic symptoms.
- Immunotherapy: This treatment may be considered more strongly with severe disease, poor response to other management options, and the presence of comorbid conditions or complications; immunotherapy is often combined with pharmacotherapy and environmental control.