Allergy Clinic, P.A.

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Non-Allergic Rhinitis

What is non-allergic rhinitis?

The term "rhinitis" means "inflammation of the nose." There are two broad categories of rhinitis: allergic rhinitis (also called "hay fever") and non-allergic rhinitis. Non-allergic rhinitis refers to inflammation in the nose that is triggered by something other than allergy, and includes many conditions: vasomotor rhinitis, irritant rhinitis, infectious rhinitis, drug-induced rhinitis, atrophic (dry) rhinitis, and rhinitis from other diseases that may affect the nose. These conditions can cause many of the same symptoms as allergic rhinitis, such as congestion, runny nose, sneezing, itching, post-nasal drip, sore throat or throat clearing, coughing, etc.

What are the triggers for non-allergic rhinitis:

Non-allergic rhinitis is triggered by a variety of irritants and environmental conditions:

1. Strong odors, fragrances, and perfumes
2. Tobacco smoke (either first or second hand exposure)
3. Dust or other airborne particulate matter
4. Atmospheric changes in temperature, humidity, sunlight, and barometric pressure
5. Alcohol ingestion
6. Chemical fumes or vapors
7. Molds (mold can cause allergic or irritant reactions)
8. Infections (viral, bacterial, fungal, etc)
9. Prescription or over-the-counter medications that affect the nose

People with non-allergic rhinitis are more sensitive than the general population to these various triggers, and respond by developing an inflammatory reaction in their nasal passages which leads to their symptoms.

How is non-allergic rhinitis distinguished from allergic rhinitis?

Non-allergic rhinitis is best distinguished from allergic rhinitis by negative skin tests (indicating the lack of specific allergic antibodies [IgE]), but the age of onset, the progression of symptoms, the specific triggers for symptoms, the response to medications, and the physical exam can give supporting evidence for non-allergic rhinitis as well.

Can I have both allergic rhinitis and non-allergic rhinitis at the same time?

Yes. In fact, this is common. Over 50% of patients with allergic rhinitis also have non-allergic triggers for their nasal symptoms. They are sometimes referred to as having "mixed" rhinitis. The relative contribution of allergic and non-allergic triggers is different for each patient, and will also change at different times of the year and in different environments depending on the exposure to the relevant triggers.

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Does allergen immunotherapy ("allergy shots") work for non-allergic rhinitis?

Allergy shots work by altering both the immune response to allergens and the production of allergic antibodies. Since allergies are not the source of symptoms in patients with ONLY non-allergic rhinitis, allergy shots have not been shown to be effective. In those patients who have both allergic and non-allergic rhinitis, allergy shots may be effective against the allergic component.

How do you treat non-allergic rhinitis?

Unfortunately, there is no "cure" for non-allergic rhinitis, but with appropriate therapy, most patients can feel better. The goal of treatment of non-allergic rhinitis is to minimize symptoms by 1) identifying and avoiding triggers, 2) using medications to reduce the inflammation, congestion, and runny nose, and 3) identifying and treating other co-existent contributing conditions

1) **Avoid Triggers:**

- **Cigarette smoke** is one of the most common non-specific irritants. Try to avoid second-hand exposure as much as possible. If you smoke, quitting is the BEST thing you can do for your nose (and for a number of other health concerns). Several resources are available to help you. It is the best health decision you will ever make.
- **Avoid direct irritants** whenever possible. When exposure is anticipated (ie using cleaning agents, vacuuming, raking leaves, etc.) wear a mask to decrease nasal / respiratory exposure. Minimize exposure to perfumes, colognes, or strong vapors.
- **Avoid rapid temperature and / or humidity changes** whenever possible.

2) **Medications:** These may be taken either on a regular basis and/or an "as needed" basis. The medications that help you may change with the season if the predominant trigger(s) change. Some of the commonly used medications include the following, alone or in combination:

- **Nasal Steroids**: (ie Flonase, Rhinocort, Nasacort, Nasonex, Nasalide, Beconase, Vancenase) are nasal sprays that work by decreasing inflammation in the nose, both from allergic as well as non-allergic triggers. These are slow onset medicines (peak effect occurs gradually over 2-3 weeks) and because of this are usually used as daily, "controller" medicines, but may be increased or decreased as symptoms require.
- **Anticholinergic Nasal Spray** Atrovent nasal spray is very useful for decreasing secretions and reducing runny nose. It may be used as little as once per day or as often as four times per day, depending on the frequency and severity of symptoms.
- **Oral Decongestants**: such as Sudafed (pseudoephedrine) are typically used "as needed" for the more severe congestion symptoms. Regular use is not recommended as these medications can lead to increased heart rate and blood pressure.
- **Saline Irrigation** Washing the nasal cavity with a salt water solution is helpful for any type of rhinitis. It may be done several times per day and does not interfere or interact with any medications. You should not try to make a solution without proper directions. Your allergist will advise you on how to obtain the correct concentration of saline solution.
- **Antihistamine Nasal Spray** Astelin nasal spray is a topical antihistamine nasal spray that can be helpful as an adjunctive agent in non-allergic rhinitis and can be used either regularly or as needed.
- **Antihistamines**: (ie Allegra, Zyrtec, Claritin, Benadryl, chlorpheniramine, brompheniramine, triprolidine, etc) are commonly used to treat nasal allergies. These can occasionally work for patients with non-allergic rhinitis, however symptom relief is usually due to the "side effects" of drying mucous membranes and decreasing nasal secretions.
- Do NOT use topical decongestants (i.e., Afrin) for more than 3 days, even if your nasal congestion is severe. Rebound rhinitis or "rhinitis medicamentosa" can result in symptoms that are even worse.

3**) Assessment for other Contributory Conditions**: These may include nasal polyps, chronic sinusitis, gastroesophageal reflux (GERD), and anatomic problems (such as a severely deviated septum), and others. Based on your history, physical exam, and response to treatment, your allergist may recommend additional evaluation or treatment in these areas.