

Slide 1 Introduction

Slide 2 Rhinitis vs Sinusitis. Symptoms of Allergy

Inflammation, pressure and drainage which affects only the nose is called a “Rhinitis”. That which affects the sinuses is called a “Sinusitis”. Thus, “Sinus” refers to the location of the problem and not the cause. Important symptoms are nasal pressure, obstruction and drainage. These symptoms are common to all causes of “Rhinitis” and “Sinusitis”

Slide 3 Allergic Rhinitis

An allergy is an undesired reaction of the body’s immune system to outside antigens such as pollens and mold spores. Symptoms of allergy include, itchy watery eyes, sneezing, wheezing, rashes and hives. Nasal allergies may have any of these symptoms along with clear nasal drainage. The patient otherwise feels well. The patient does not feel sick and does not have a fever. The following is a video of the inside of the nose of a patient with a mild allergic rhinitis.

Slide 4 Vasomotor Rhinitis

The patient presents with many of the signs and symptoms of a nasal allergy but allergy tests are negative and the patient responds poorly to antihistamines and nasal steroids.

Slide 5 Acute Rhinitis

This is caused by bacterial or viral infections of the nose or sinuses. It can also be caused by a “Cold”. Unlike an allergy, the patient is sick, has a fever and has thick colored nasal secretions. It should be noted that nasal swelling from an severe allergy can cause an acute infection.

Slide 6 Seasonal VS Perennial

Allergic symptoms which only occur during a certain season are called seasonal. Those that occur year round are called perennial. Seasonal allergens include: Tree pollens in early spring, grass pollens in latter spring, and weed pollens in the fall. Perennial allergens include household molds, animals, and dust mites.

Slide 7 Rain vs Dry

If your symptoms get better after it rains then you may have an allergy to pollens. If your symptoms worsen after it rains then you may be allergic to molds.

Slide 8 Antihistamines

An allergy is an immune response involving IgE which triggers the release of histamine. Histamine causes the swelling, itching and sneezing associated with allergy. An

antihistamine is a drug which blocks the effects of histamine. Side effects of some antihistamines include dryness, drowsiness, urinary retention and impotence.

Slide 9 Decongestants

Decongestants work to relieve pressure and open the nasal airway by constricting blood vessels. If taken in a nasal spray, decongestants should never be used more than 2 to 3 days or rebound swelling can occur once the drug is stopped. Side effects of decongestants include: Elevation of blood pressure, lowers insulin requirements in diabetics and reactions with MAO inhibitors and anti-Parkinson medications.

Slide 10 Mast Cell Stabilizers

Mast cell stabilizers prevent the mast cells from releasing histamine when stimulated by IgE. They have very few side effects, but tend to take several weeks to start to work and often have to be taken several times a day.

Slide 11 Nasal Steroids

Nasal steroids reduce swelling and the effects caused by histamine. When given as a nose spray their effects are maximum on the lining of the nose. However some of the drug is still absorbed and may rarely cause adverse reactions. Different types of nose sprays are absorbed to different degrees. Your doctor may wish to prescribe one which has little systemic absorption in order to reduce the possibility of developing an adverse reaction.

Slide 12 Side Effects

The major side effect of topical nasal steroids are yeast infections of the nose and nasal septal perforations. Yeast infections are easily treated but a perforation of the nasal septum as shown in this picture is hard to treat. Thus, patients on nasal steroids should be followed by their doctor every 3 to 4 months to prevent a nasal septal perforation from occurring.

Slide 13 Allergy Testing

Allergy testing lets one know what you are allergic to and allows for the mixing of serum used in allergy shots. Allergy shots inject substances, or antigens, that you are allergic to under the skin and stimulates the production of IgG blocking antibodies. A common method to determine what you are allergic to is the prick test. This involves pricking the skin and placing antigens on the prick sites. This test tells what you are allergic to but not the strength of the allergy.

Slide 14 Skin Endpoint Titration

This test injects antigens of different strengths under the skin and then determine the strength of a patient's allergy to these antigens. Using this method a stronger serum can be produced. This reduces the time it takes a patient to build up to maintenance and symptom relief. Another great advantage for the patient is that shots are given once a week instead of two or three times a week.

Slide 15 RAST

RAST testing is a blood test which also determines a strength of an allergy. This test tends to be expensive and also is not as sensitive as skin endpoint titration. It is useful, in young patients who will not tolerate other allergy tests or in patients on beta-blockers or other medications which prevent allergy testing.

Slide 16 Our Method

In our office we test for a battery of inhalation allergens using prick testing then retest the positive antigens using skin end point titration. This allows the patient to take the least amount of allergy shots to reach maintenance and lowers the total cost of treatment. Shots can usually be given once a week, instead of two or three times a week. Skin testing is unreliable for food allergens and thus we do not perform type of testing in our office.

Slide 17 Surgery

Surgery is only performed as a last resort in an attempt to improve symptoms of rhinitis and sinusitis. Children should be over the age of six to eight years and most patients should have failed at least 3 months of medical therapy. Surgery may be performed sooner if there is a severe infection, massive nasal polyps, an impending complication or a suspicion of a cancer. The following is a video showing the surgical removal of a nasal polyp.

Slide 18 Allergy Proof Your House

Indoor molds grow anywhere it is wet. This includes, basements, bathrooms, garages, kitchens and around all plants. Using a dehumidifier and replacing real plants with plastic plants will often help.

Slide 19 Allergy Proof Your House

A house dust allergy is actually an allergy to fecal material of the dust mite. Removing carpets and installing wooden or linoleum floors will help, especially in the bedroom where you spend the most time. A plastic cover over bedroom pillows and mattress will help to reduce exposure. Bed sheets and linens should be washed in hot water.

Slide 20 Allergy Proof Your House

Keep animals outside. Do not sleep with your pets. A HEPA filtered vacuum cleaner can also be helpful. If you are allergic to outdoor allergens, keep the windows of your house down and install HEPA furnace filters. A free-standing HEPA air filter will also help clean the allergens from your house.

Slide 21 Questions

If you have any questions, feel free to talk to me or one of our staff after this presentation or you may call our office at any time.