

Indirect causes include:

- ▶ Tonsillitis or pharyngitis
- ▶ Dental problems
- ▶ TMJ disorder
- ▶ Sinus problems

Treatment for ear pain depends on the cause. If a child presents to you with ear pain, first obtain a history and then look in the ear canals and the throat. If the ear drums appear red, the ear canals appear mildly swollen, or the tonsils appear red and swollen, the parents should be instructed to bring their child to their pediatrician (especially in the setting of a fever).

If severe ear canal swelling, bleeding from the ear, purulent drainage from the ear, or a foreign body in the ear is seen, the patient should be urgently referred to an Ear, Nose, and Throat physician. Also, for any child having ear pain that is associated with tinnitus, vertigo, facial weakness, or sudden loss of hearing, an immediate consultation with an Ear, Nose, and Throat physician is warranted.

NOSEBLEEDS

Epistaxis most commonly arises from the front portion of the nasal septum, the wall that divides the nose into a right and left side. Although the quantity of blood may appear to be great, only a small amount is actually lost during most nosebleeds. In children, bleeding is often caused by trauma or picking at dried mucous crust.

Dryness contributes to nosebleed. This can be due to the environment, dehydration, or anatomic variations such as a septal deviation. Frequent nose blowing due to allergies or an upper respiratory infection can lead to bleeding. Nosebleeds are common and frequently occur without any obvious cause.

If nosebleeds are a problem, give your patients the following instructions:

- ▶ Avoid nose blowing. When sneezing, keep mouth open so that the force of the air disperses thru the mouth. Treat allergies and infections aggressively
- ▶ Avoid bending over, heavy lifting, or strenuous activity, especially contact sports
- ▶ Avoid aspirin, motrin or advil
- ▶ Avoid exposure to cold air
- ▶ Use nasal saline spray frequently

If bleeding occurs, instruct your patient to:

- ▶ Sit upright and lean slightly forward
- ▶ Grip the tip of the nose (soft part) between your index finger and thumb, and apply firm pressure for about 10 minutes
- ▶ A nasal decongestant spray can be placed into the nose, or ice can be placed around the central face, to help constrict the blood vessels
- ▶ If bleeding does not stop, contact an ENT physician or send the patient to the local emergency room



Attention: School Nurse

Dear School Nurse,

With the new academic year back in full swing, students with nosebleeds, ear pain, and food allergies will seek your advice. ENT and Allergy Associates would like to help you care for these students by providing helpful information about these common disorders in this pamphlet. If you need further assistance, please feel free to contact us. Have a healthy school year!

Sincerely,
The Physicians of ENT and Allergy Associates



Westchester County, NY

New Rochelle: 914-235-1888 • Purchase: 914-253-8070
Sleepy Hollow: 914-631-3053 • Tuckahoe: 914-961-2515
White Plains: 914-949-3888 • Yonkers: 914-963-8588
Yorktown: 914-245-2681

Putnam and Rockland Counties, NY

Carmel: 845-279-9500 • West Nyack: 845-727-1370

Orange and Dutchess Counties, NY

Fishkill: 845-896-1809 • Newburgh: 845-562-0760
Poughkeepsie: 845-471-4086

New York City

Bayside: 718-631-8899 • Bay Ridge: 718-748-5225
Bay Ridge West: 718-833-0515 • Bronx: 718-863-4366
East Side: 212-722-5570 • Gramercy: 212-679-3499
Park Slope: 718-208-4449 • Staten Island: 718-370-0072
Wall Street: 212-571-0355 • West Side: 212-600-9411

Nassau County, NY

Garden City: 516-222-1881 • Lake Success: 516-775-2800

Suffolk County, NY

Southampton: 631-283-1142 • Riverhead: 631-727-8050
East Hampton: 631-591-3510

Bergen County, NJ

Englewood: 201-567-2771 • Hackensack: 201-883-1062
Oradell: 201-722-9850

Morris, Hudson and Passaic Counties, NJ

Parsippany: 973-394-1818 • Hoboken: 201-792-1109
Wayne: 973-633-0808

Middlesex and Somerset Counties, NJ

Edison: 732-549-3934 • Old Bridge: 732-679-7575
Somerville: 908-722-1022

FOOD ALLERGIES

With a true food allergy, an individual's immune system will overreact to an ordinarily harmless food. This is caused by an allergic antibody called IgE (Immunoglobulin E), which is found in people with allergies. Food allergy often may appear in someone who has family members with allergies, and symptoms may occur after that allergic individual consumes even a tiny amount of food.

Food intolerance is sometimes confused with food allergy. Food intolerance refers to an abnormal response to a food that is not an allergic reaction. It differs from an allergy in that it does not involve the immune system. A perfect example of this is lactose intolerance. Individuals with this disorder experience uncomfortable abdominal symptoms after consuming dairy products. It is due to the absence of an enzyme which is required for proper digestion of the sugar in milk, called lactose.

The most common food allergens – responsible for up to 90% of all allergic reactions – are the proteins in cow's milk, eggs, soy, wheat, fish, shellfish, peanuts and tree nuts. Testing a child or adult for food allergies can be done locally by a board certified allergist/immunologist. Both skin tests and blood tests are accurate in identifying the responsible food allergens.

The most serious type of allergic reaction is called anaphylaxis, and may involve respiratory, gastrointestinal and cardiac symptoms. Respiratory symptoms may include coughing, wheezing and chest tightness, very much like asthma symptoms. There may also be swelling of the upper airway, causing stridor. Gastrointestinal symptoms of food allergy include vomiting, diarrhea and abdominal cramping, which can be severe. These symptoms may occur alone, with no hives or breathing problems, but can signify a serious allergic reaction. One of the most serious reactions that can occur is a fall in blood pressure, or shock. The individual's pulse would be very rapid to try and compensate for the loss in blood pressure. Symptoms might include sluggishness, pallor, swooning or fainting.

A child with a known food allergy, who has ingested the offending food, should be administered an antihistamine, such as Benadryl. Most mild allergic reactions can be treated with antihistamines alone. For children at risk of a serious allergic reaction, an epinephrine auto-injector is usually prescribed (EpiPen, Twinject). These should be administered as soon as it is clear that a serious reaction is occurring. The effects of the epinephrine wear off after 20 minutes, and sometime further treatment may be necessary. That is why all persons administered an epinephrine for a serious allergic reaction should seek immediate medical attention.

Prevention of allergic food reactions is of paramount importance. This can only be achieved by strict avoidance. In a school lunchroom, provision of a milk-free or a peanut-free table has been found to be successful at preventing unwanted exposure to the food in question. Children with food allergies should sit at the table, and may be joined by any of their friends who do not have that particular food in their lunch box. In the classroom, children should be encouraged to wash their hands after a snack, and desk and table tops should be wiped off, and utensils cleaned or discarded. Useful suggestions for parents and school personnel can be found at the website of the "Food Allergy and Anaphylaxis Network" at www.foodallergy.org.

NASAL TRAUMA

The human nose is composed of bone, soft tissue, and cartilage. It serves as a passageway for air to flow from the outside environment into the lower respiratory tract and lungs while simultaneously warming and humidifying air that enters the body. As the most prominent and anterior feature of the face, the nose is easily exposed to trauma. Nasal trauma is defined as any injury to the nose that results in bleeding, a nasal deformity, a decreased ability to breathe normally because of obstruction, and may even result in an impaired sense of smell.

The nose is composed of cartilage and bone. The cartilaginous skeleton of the nose is supported by the paired nasal bones superiorly, the maxilla, and the vomer, a bone located in the posterior aspect of the nasal septum. Overlying this framework are soft tissues, mucous glands, muscles, and nerves responsible for the sensation and function of the nose. Although most of the nasal structures are cartilaginous, the nasal bones may be fractured in an injury.

The nose is the most common area injured in cases of facial trauma, with nasal fractures accounting for approximately 40 percent of facial bony injuries. Fights and sports injuries account for most cases of nasal trauma in adults, followed by falls and vehicle crashes. Play and sports account for the vast majority of incidents of nasal injuries in children although physical abuse should be suspected in cases of repetitive injuries to the nose and / or frequent bruising to other areas of the body.

Signs of Nasal Trauma

- ▶ Twisting, flattening or other deformation of the shape of the nose
- ▶ Pain, redness or swelling of the nose
- ▶ Bleeding from the nose
- ▶ Crepitus – a crunching sensation or sound which occurs when ends of a fractured bone are rubbed together
- ▶ Airway blockage from bleeding, fluid discharge which may be clear or mucus colored
- ▶ Rhinitis - an inflammation of the mucous membranes lining the nose which may lead to increased tear production in the eyes and a runny nose

- ▶ Septal hematoma – a pocket of blood which forms between the cartilaginous septum and the mucosal lining which overlies the septum. This collection of blood may potentially destroy the septal cartilage and warrant immediate attention by an ENT.
- ▶ Bruising or discoloration (ecchymosis) of the tissues around the nose or eyes

Initial Management

- ▶ If loss of consciousness has occurred, the cervical spine should be stabilized, basic life support measures such as ABC's (airway, breathing and circulation) should be instituted and the emergency medical response team should be activated (911 should be called) for an evaluation by an ER physician.
- ▶ If no loss of consciousness has occurred and the patient is bleeding from the nose, pressure should be applied over the soft lower anterior portion of the nose for 3 to 5 minutes.
- ▶ If bleeding persists, a common nasal decongestant spray such as Afrin may be squirted in the nose and with pressure reapplied in the manner described above.
- ▶ Crushed ice in a plastic bag or wrapped in a towel may be gently applied over the nose to decrease pain and swelling.
- ▶ In a case of penetrating trauma to the nose or face, the foreign object should not be removed.

Treatment of nasal trauma is best performed within the first few hours after the injury, but if this is not possible an evaluation by a physician should be done within 24 hours of the time of injury and a referral to ENT should take place no more than 72 hours after the time of injury.

Timing is of utmost importance when treating nasal fractures because delays longer than five to seven days may allow the broken bones to set without proper alignment or lead to complications as such as scar tissue formation and airway obstruction. Poorly set nasal fractures usually require surgical correction.

EAR PAIN

Ear pain (otalgia) is a common complaint in children. It is important for the cause of ear pain to be uncovered, because this symptom can be due to many conditions ranging from mild to very serious.

Pain presenting in the ear can have a direct cause or be due to referred pain from another area that radiates to the ear. Some of the more common direct causes of ear pain include:

- ▶ Middle-ear infections
- ▶ Swimmer's ear (outer-ear infection)
- ▶ Wax impaction
- ▶ Pressure, often from flying
- ▶ Trauma to the ear canal
- ▶ A foreign object lodged in the ear canal