



SINUSITIS

What is sinusitis?

Sinusitis is inflammation of the mucous membranes lining the sinus cavities, which are the hollow spaces around the nose and eyes. Normally, sinus cavities are filled with air, and mucus created there drains into the nasal passages. When the mucous membranes become inflamed and drainage pathways are blocked, mucus can become trapped in the sinuses and infection can occur.

What are the symptoms of sinusitis?

- Reduced or absent sense of smell (hyposmia or anosmia, respectively)
- Nasal blockage
- Cloudy or discolored nasal drainage
- Fatigue
- Facial or dental pain/pressure
- Ear fullness
- Fever
- Cough

What are the different types of sinusitis?

Sinusitis can be caused by viruses, bacteria, or, vary rarely, fungi.

- Viral infections: improve on their own within 10 days and do not get worse after beginning to improve
- Bacterial infections:
 - Acute: lasting more than 10 days without improvement or with worsening of symptoms
 - Recurrent: 4 or more episodes occurring per year
 - Chronic: lasting for 3 months or more -- symptoms may be less severe than those of acute infections; however, untreated chronic sinusitis can cause damage to the sinuses that sometimes requires surgical intervention
- Fungal infections: very rare and occur primarily in people who have weakened immune systems related to chemotherapy for cancer, or to severe, poorly controlled diabetes

How is sinusitis diagnosed and treated?

Diagnosis of sinusitis is usually based on a discussion of your symptoms, a physical examination, and endoscope findings. Treatment will vary depending on causative organism.

- Viral sinus infections: do not improve with antibiotics, and unnecessary use of antibiotics may contribute to antibiotic resistance. They may be treated with pain relievers (e.g. Tylenol or Advil), steroid nasal sprays (e.g. Flonase, Nasacort), saline sinus irrigations, and oral decongestants (e.g. Sudafed).
- Bacterial sinus infections: treated with an appropriate antibiotic (e.g. amoxicillin, Augmentin, Levaquin). In addition to an antibiotic, a steroid nasal spray and/or oral decongestant may be recommended. Using saline nasal sprays or irrigations can help relieve sinus discomfort. If your symptoms do not resolve after 2 courses of appropriate antibiotics, your Ear, Nose, and Throat physician may order a CT (CAT) scan of your sinuses to confirm a diagnosis of chronic sinusitis.
- Fungal sinus infections: exceptionally rare, and typically treated with emergent surgery and intravenous anti-fungal medications.

Sinus Surgery:

Surgery should be considered if medical treatment fails or if there is nasal obstruction (e.g. deviated nasal septum) that cannot be corrected with medications. The type of surgery is chosen to best suit the patient. Functional endoscopic sinus surgery (FESS) is recommended for certain types of sinus disease. With the endoscope, the surgeon can look directly into the nose and remove diseased tissue and polyps, clearing the narrow channels between the sinuses and the nasal cavities. In other instances, balloon sinuplasty can be performed in the office with local anesthesia. Your doctor inflates a balloon to widen the narrow channels between the sinuses and the nasal cavities. The decision whether to use local or general anesthesia and what procedures are necessary will be made between you and your doctor, depending on your individual circumstances.

How can sinusitis be prevented?

To avoid developing sinusitis during a cold or exposure to allergens, keep your sinuses clear by doing the following:

- Properly manage allergies. Routine use of oral antihistamines (e.g. Allegra, Claritin, or Zyrtec) or steroid nasal sprays (e.g. Nasacort or Flonase) may offer relief from increased secretions caused by exposure to allergens
- Aid the clearance of trapped mucus with daily saline nasal irrigations
- Hydrate adequately (we recommend eight, 8oz. glasses of water each day)
- Minimize air travel. If you must fly, use a nasal spray decongestant before take-off to prevent blockage of the sinuses and allow mucus to drain.