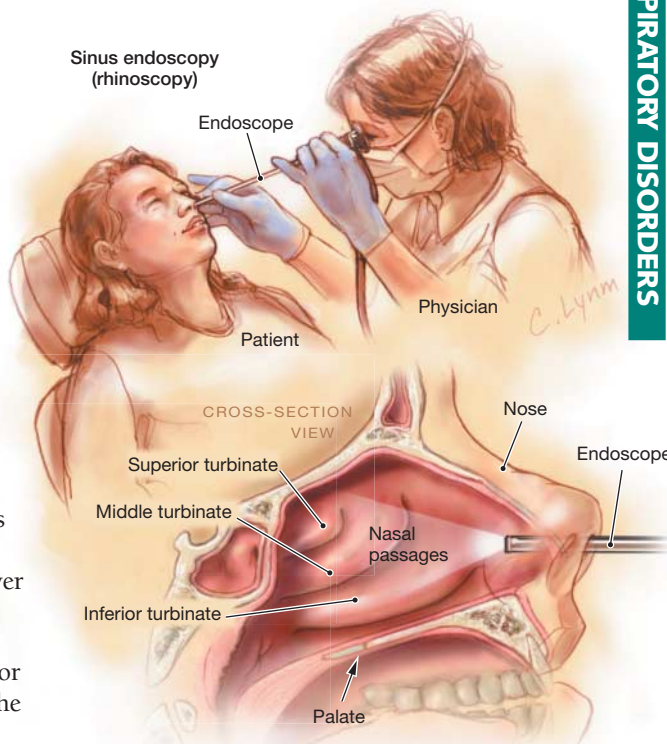


Chronic Sinusitis

Sinusitis is an infection or inflammation of the nasal sinuses.

Acute bacterial sinusitis usually happens after a person develops an **upper respiratory tract infection** (a cold).

Colds are caused by viruses, but they cause swelling in the nasal passages and may make it difficult for the sinuses to drain normally. The sinuses can then become infected with bacteria. Chronic sinusitis is due to long-standing inflammation and swelling that do not go away on their own. Sometimes people who have chronic sinusitis develop acute sinusitis in addition to their existing condition. Nasal **polyps**, growths within the nasal cavity, block drainage from the sinuses and can be part of chronic sinusitis. Individuals who have hay fever and nasal allergies (**allergic rhinitis**) or who have asthma are more likely to develop chronic sinusitis and nasal polyps. Patients with these symptoms may be referred to an allergist or an **otolaryngologist**, a doctor with specialized education in the management of ear, nose, and throat disorders.



SIGNS AND SYMPTOMS

- Facial pain or pressure
- Nasal congestion and discharge
- Difficulty breathing through the nose and loss of sense of smell
- Postnasal drip

DIAGNOSIS AND TESTING

Swollen **nasal mucosa** (the lining of the nose) may be red, irritated, or inflamed. Pus-filled discharge may be present. Computed tomography (CT scan) or magnetic resonance imaging (MRI) may also show the sinuses filled with fluid or in an inflamed, swollen state. CT scan or MRI may be used to look for serious complications of sinusitis, such as involvement of the **ocular** (vision) system, meningitis, or encephalitis. Because sinusitis symptoms can be similar to those of other illnesses, in some cases it may be necessary to do tests to make certain there is not another cause of the symptoms.

TREATMENT

- Your doctor will recommend antibiotic treatment if there are signs and symptoms of bacterial infection.
- Decongestants reduce swelling in nasal passages, making it easier to breathe.
- Oral steroids reduce swelling in the nasal cavity and improve inflammation within the sinus cavities. Inhaled steroids, sprayed directly into the nose, also improve swelling and inflammation.
- Other medications that reduce inflammation of the entire airway may be prescribed. These medications often take several weeks to be fully effective.
- Nasal irrigation with salt water may be recommended.
- **Sinus endoscopy** (using a lighted instrument to look at the sinuses through the nose) and endoscopic sinus surgery may be offered to patients who have severe chronic sinusitis that has not been helped with medications. Often, a deviated septum occurs with sinusitis. This can be surgically repaired with a procedure called a **septoplasty**.

FOR MORE INFORMATION

- American Academy of Otolaryngology–Head and Neck Surgery
www.entnet.org
- National Institute of Allergy and Infectious Diseases
www.niaid.nih.gov

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page Index on JAMA's Web site at www.jama.com. Many are available in English and Spanish. A Patient Page on acute sinusitis was published in the May 6, 2009, issue.

Sources: American Academy of Otolaryngology–Head and Neck Surgery, National Institute of Allergy and Infectious Diseases, Centers for Disease Control and Prevention

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