



SINUSITIS

Sinusitis is inflammation of the paranasal sinuses, the air cavities within the cheekbones found around and behind the nose. The sinuses have a lining of cells that have small hair-like extensions (cilia) that beat and move mucus out of the sinuses and into the nasal cavity through small openings (ostia). Organisms in the sinuses are trapped in the respiratory mucus and transported by ciliary action towards the back of the throat where they are swallowed. Obstruction of the ostia leads to accumulation of secretions in the sinuses, ciliary damage, thickening of the sinus mucus and decreased clearance of bacteria, all of which lead to sinusitis.

Conditions that predispose to sinusitis include:

1. Viral upper respiratory infections (“colds”), which cause swelling and inflammation of the nasal tissues with obstruction of drainage and ciliary damage.
2. Allergic rhinitis, which causes mucosal swelling and inflammation.
3. Smoking.
4. Nasal polyps (benign grape-like growths inside the nose) that block drainage.
5. Enlarged adenoids.
6. Foreign objects in the nose.
7. Non-allergic rhinitis.
8. Immune deficiency.

Acute sinusitis often presents as a cold with colored drainage that lasts longer than 7 days. You may have a fever, pain over the affected sinuses, headache, cough, fatigue, tooth discomfort, thick, foul post nasal drip, persistent nasal congestion, “bad breath”, decreased sense of smell and taste and a sore throat. A serious sinus infection may be present even with no drainage. Sinus pain may be present, but is an unreliable indicator of an infection. If the air pressure in the atmosphere is different than that in the sinuses, severe pain can result without any infection being present. Chronic sinusitis may be very subtle. The only symptoms may be cough or asthma, which is difficult to get under control.

Sinusitis is diagnosed by taking a detailed medical history and performing a physical exam. The best of physicians may be correct in the diagnosis of sinusitis only half of the time. As a result, if the sinusitis appears to be recurrent or if a course of antibiotics poses a significant increased risk to a person, (as with a person allergic to multiple antibiotics) a more definitive diagnosis may be needed. Sinus x-rays have been useful in showing severe infections in the larger sinuses. A CT scan of the sinuses provides a detailed view of the drainage systems of the sinuses and the interior of the sinuses. It can detect more subtle infections, as well as structural abnormalities that can contribute to sinusitis.

Treatment of sinus infections often requires a course of antibiotics for two to six weeks. Additionally, decongestants, mucus thinning medications and steroid nasal sprays are often prescribed to encourage drainage. Treatment can fail due to resistance of bacteria to the antibiotic. The drainage system may have a persistent blockage that may require a consultation with an ENT (ear, nose and throat) physician with occasional surgical recommendations.