



Endoscopic Sinus Surgery

**Board Certified Otolaryngologists
Head and Neck Surgeons**

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Sinus Disease

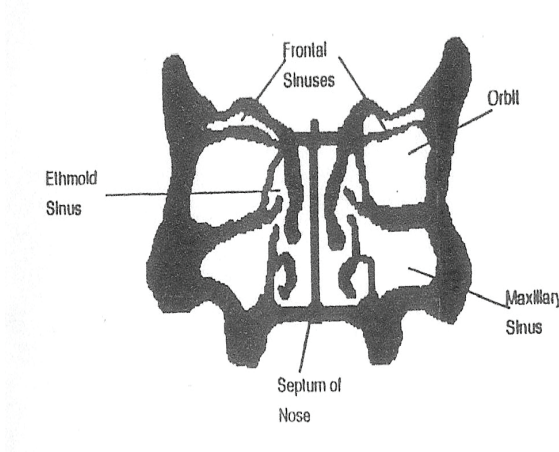
Chronic sinusitis is either a result of failure of the lining of the sinus to clean and protect itself, or from obstruction of the outflow tract of the sinus.

The lining of the upper respiratory system is mucosa. This mucosal membrane filters out foreign debris and germs that we breath in the air. Dysfunction in the mucosa that lines the nose and sinuses will predispose an individual to infection. Allergies, viral infections, chemical irritants, or certain congenital conditions can lead to failure of the mucosa to protect the upper respiratory system from infection.

There are four sinuses that drain into each side of the nose. These sinuses are called the Frontal (forehead), Maxillary (cheek), Ethmoid (between the eyes), and Sphenoid (back of the nose). Each sinus must maintain a continuous exchange of air (ventilation), as well as a clearance of the continuous production of mucous (drainage). Obstruction of the outflow tract of the sinuses can lead to infection. This obstruction could be the result of swelling from a viral upper respiratory infection (“Cold”), swelling from allergies, nasal polyps, deviation of the nasal septum, or failure of the sinus outflow tract to develop properly.

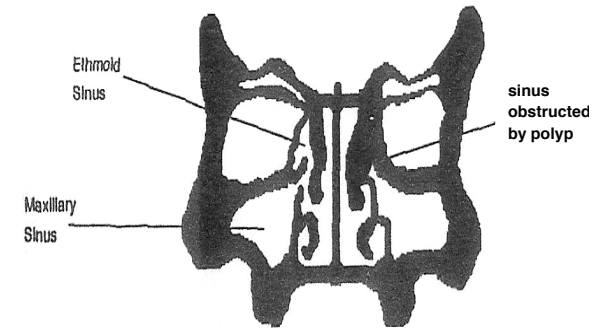
Most people develop chronic sinus problems from a combination of dysfunction of the lining of the nose and sinuses, as well as some obstruction of the outflow tract of the sinus. Decongestants, antihistamines, steroid nose sprays, and allergy shots are attempts to help the lining of the upper respiratory system protect itself. Obstruction of the sinuses may occur temporarily with some upper respiratory

infections from swelling. When this swelling does not resolve as the infection clears, or if there is an underlying obstruction of the sinus then an operation to drain the sinus and restore normal ventilation may be necessary.



Endoscopic Sinus Surgery

Endoscopic sinus surgery utilizes a rigid scope to illuminate and magnify the surgical site. The sinus endoscope allows the surgeon to operate within the ethmoid sinus with magnification and with excellent lighting. The ethmoid sinus is the primary pathway for the outflow tract of the other paranasal sinuses into the nose. The objective of an Endoscopic Ethmoidectomy is to clean any diseased mucosa from the ethmoid sinus system as well as cleaning and enlarging the outflow tracts from the maxillary, frontal, and sphenoid sinuses



The location of the ethmoid sinuses between the eyes and underneath the brain creates the potential for these surrounding structures to be injured. The risk of injury to the eye could involve double vision or possible vision loss. Injury to the bone separating the ethmoid sinus from the brain may result in a leak of cerebral spinal fluid (CSF) into the nose. A CSF leak usually resolves spontaneously, however meningitis would result if the CSF fluid were to become infected. This is a serious infection that would require intravenous antibiotic therapy. If meningitis is not diagnosed and treated promptly it can be life threatening. The tear duct also drains into the nose from the eye and could be damaged in this operation resulting in an eye that “waters”.

These complications that are rare with Endoscopic Sinus Surgery must be weighed with the potential benefits to ones health in making a decision to have surgery. Your ENT Specialists physician will discuss these issues with you.