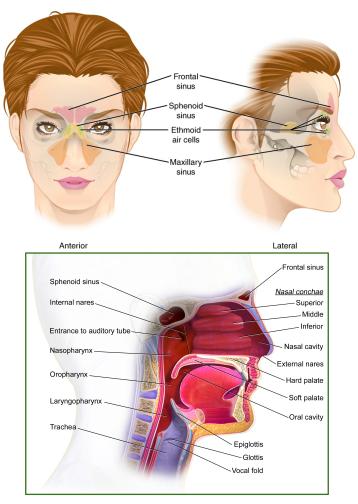


## **CHRONIC SINUSITIS & SINUS SURGERY**

The following has been adapted from the American Academy of Otolaryngology Head and Neck Surgery website. The full articles may be found here: <u>https://www.enthealth.org/conditions/sinusitis/</u>



Sinuses are hollow spaces in the bones around the nose that connect to the nose through small, narrow channels. Sinusitis, also called rhinosinusitis because the symptoms involve both the nose and the sinuses, affects about one in eight adults annually. For many, the inflammation starts when viruses or bacteria infect your sinuses (often during a cold), and begin to multiply. Part of the body's reaction to the infection causes the sinus lining to swell, blocking the channels that drain the sinuses. This causes mucus and pus to fill up the nose and sinus cavities. For others,



the symptoms and inflammation may be the result of the nose and sinuses reacting to other things in the environment, but not be an infection.

## What Are the Symptoms of Sinusitis?

**Chronic sinusitis** may be present if you have at least two of the four symptoms noted below for at least 12 weeks. An ENT specialist would also need to see polyps, pus, or thickened mucous in the nose, or get a CT scan, to fully diagnose chronic sinusitis. Possible symptoms include:

- Stuff congested, or blocked nose
- Pain, pressure or fullness in the face, head or around the eyes
- Thickened nasal drainage
- Loss of smell

Chronic sinusitis is treated differently than acute sinusitis. Because chronic sinusitis is caused more by inflammation than infection, the treatments for chronic sinusitis aim to control the inflammation. Salt water nasal irrigation, nasal steroid sprays, and often oral steroids (Prednisone or Medrol Dosepaks) are the main treatments for the symptoms of chronic sinusitis. Prolonged courses of antibiotics (sometimes 3 weeks or more) are also often included in the medical management of chronic sinusitis.

Other factors, including allergies, nasal polyps, asthma, and problems with the body's ability to fight infections, can go along with sinusitis and make it worse unless they are also treated.

## What is the treatment of chronic sinusitis?

For chronic sinusitis, surgery is usually the option of choice when the symptoms cannot be controlled with medications and other treatments. The most common type of surgery for the sinuses is called **Functional Endoscopic Sinus Surgery (FESS)**. A pencil-sized scope (endoscope) is used to see inside the nose and sinuses and guide the surgery. The surgery widens the natural drainage pathways between the sinuses and the nose, allowing mucus to get out of the sinuses and air to get in. Medications that are delivered into the nose and sinuses, like sprays and irrigations, can also get into the sinuses better after surgery.

**Balloon Sinuplasty** is a newer treatment option where an endoscope is also used, but instead of carefully removing the bone and tissue that may be blocking a sinus,



a balloon is used to make the sinus openings bigger. Balloon sinuplasty may not be appropriate for every type of chronic sinusitis and cannot be used on all of your sinuses, but can be helpful depending on your circumstances.

## Are There Potential Dangers or Complications to sinus surgery?

As with any surgical procedure, endoscopic sinus surgery has associated risks. Although the chance of a complication occurring are very small, it is important that you understand the potential complications and ask your surgeon about any concerns you may have.

- *Bleeding*: Most sinus surgery involves some degree of blood loss, which is generally well tolerated by the patient. About 1% of the time, significant bleeding may require termination of the procedure. Although most patients do not require nasal packing, a few patients will require a small nasal pack or tissue spacer to be removed after one week.
- *Recurrence of disease*: Although endoscopic sinus surgery provides significant symptomatic benefits for the vast majority of patients, surgery is not a cure for sinusitis. Especially if you also have nasal polyps, you can expect to continue with your sinus medications even after successful sinus surgery, although in general your requirements for such medications should be lessened. In some instances, additional "touch-up" or revision surgery may be necessary to optimize your surgical outcome.
- *Spinal (CSF) fluid leak*: Because the sinuses are located near the brain, there is a rare chance of creating a leak of spinal fluid (the fluid lining the brain) or injuring the brain. Should the rare complication of a spinal fluid leak occur, it may create a potential pathway for infection, which could result in meningitis. If a spinal fluid leak were to occur, it would require surgical closure and hospitalization.
- *Visual problems*: Visual loss has been reported after sinus surgery due to injury to the eye or optic nerve. The potential for recovery in such cases is not good. Fortunately, such a complication is extremely rare, much less than 1% of all sinus surgery cases. Injury to the eye muscles may result in double vision. Persistent tearing of the eye is another possible complication. Tearing problems usually resolve on their own but occasionally require additional surgery.



• *Other risks*: Other uncommon risks of surgery include alteration of sense of smell or taste; persistence and/or worsening of sinus symptoms and facial pain; change in the resonance or quality of the voice; and swelling or bruising of the area around the eye.

Some patients have a crooked nasal septum ("deviated septum") that needs to be corrected at the time of surgery through a short procedure called septoplasty. This procedure is performed through a small hidden incision and involves dissolvable stitches that are hidden in the nostril area. If you require septoplasty, there are additional risks associated with this procedure.

- Creation of a hole connecting the right and left sides of the nasal cavity (called a septal perforation)
- Numbness of the upper teeth and nose
- Cerebrospinal fluid leak (extremely rare)
- Change in the external shape of the nose