

## **Endoscopic Nasal and Sinus Surgery: A Patient's Guide**

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### **Introduction:**

Chronic sinusitis is an illness characterized by prolonged inflammation of the lining of the nose and the sinuses. Patients with chronic sinusitis experience a variety of symptoms, including facial pressure, nasal congestion, discolored nasal discharge and “post-nasal drip.” A diagnosis of sinusitis should be made only after careful evaluation by a trained clinician. Most patients with sinusitis can be successfully treated with medications. For many patients with sinusitis, surgery is not required.

For certain patients, however, medications alone are not adequate to fully resolve symptoms. In these patients, symptoms and infections recur soon after completing even long courses of medication. Such patients who fail to respond well to medications often benefit from surgery. After reviewing your medical history and imaging studies, your ear, nose and throat specialist can help you determine if you are a surgical candidate.

### **1. What is Endoscopic Sinus Surgery?**

Endoscopic sinus surgery is a procedure designed to open the natural drainage pathways of the sinuses to restore their function and health. In chronic sinusitis, the sinuses are unable to drain adequately due to inflammation of the drainage pathways. As a result, nasal secretions become trapped in the sinuses and become chronically infected.

The goal of surgery is to carefully remove the thin, delicate bone and mucous membranes that block the drainage pathways of the sinuses. The term “endoscopic” refers to the use of minimally-invasive rigid telescopes that allow all of the surgery to be performed through the nostrils, without the need for any skin incisions. Endoscopic sinus surgery is generally performed on an outpatient basis.

### **2. What can I expect before, during and after surgery?**

## *Before Surgery*

In preparation for your surgery, your physician may prescribe a preoperative regimen of medications for you in order to optimize the condition of your sinuses for surgery. The medications may include antibiotics and/or oral steroids. If any preoperative medications are deemed necessary by your physician, please be sure to start the medications on the appropriate day and to adhere closely to the prescription.

In addition, you should avoid taking the following medications for at least 10 days prior to surgery: aspirin, ibuprofen (Motrin/Advil), naproxen (Aleve), other non-steroidal anti-inflammatories (NSAIDS), vitamin E (multivitamin is OK), ginkgo biloba, garlic (tablets) and ginseng. These medications can thin the blood and create excessive bleeding both during surgery and in the postoperative period. Tylenol is safe and may be taken anytime up to the day of surgery. St. John's wort should also be avoided for 2 weeks prior to surgery because of possible interactions with anesthesia medications.

If you smoke, it is critical that you stop smoking for at least 3 weeks prior to surgery and at least 3 weeks after surgery. Smoking during this critical window can seriously interfere with the success of the operation, resulting in excessive scarring and failure of the operation. Your primary care physician can help direct you to the resources to assist you with smoking cessation.

Finally, it is important that you inform your primary care physician that you are planning to have sinus surgery. Your primary care physician can be of great assistance in helping to make sure that you are medically cleared for surgery. Most of the necessary pre-operative testing will be performed here at OU Medicine, but occasionally old records will be requested from your primary care physician. We will make every effort to keep your primary care physician informed regarding your medical status both before and after your surgery.

## *During Surgery*

In most cases, you will receive general anesthesia for your surgery. With a general anesthetic, you will be asleep for the entire procedure. However, if you have a preference for local anesthesia, please let your doctor know as this may also be an option in some cases.

After your surgery is completed, you will spend about one hour in the recovery room, followed by an additional recovery period of 1-2 hours in the outpatient surgery unit. Most patients feel well enough to go home the day of surgery. Some patients may require a one night stay in the hospital if they need additional recovery time or if they have other medical problems that require special medical attention. You will most likely go home without nasal packing.

## *After Surgery*

For most patients, the first postoperative visit occurs one week after surgery. Your visit schedule will be determined by your doctor and will usually consist of 3 visits over the first 6 weeks. Thereafter, your visits will be spaced a few months apart, depending on how well your sinuses are healing. It is essential that you return for all scheduled follow-up appointments as careful postoperative care is critical to the success of your surgery. After 3-4 months, most patients' sinuses have healed completely and visits for maintenance care are then made a few times per year.

### **3. What are the risks of surgery?**

As with any surgical procedure, endoscopic sinus surgery has associated risks. Although the chances 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. However, on occasion, significant bleeding may require termination of the procedure. Although most patients do not require nasal packing, a few patients will require nasal packing to be removed at the first post-operative visit. Blood transfusion is rarely necessary and is given only if the patient's health would otherwise be compromised.

--Recurrence of disease: Although endoscopic sinus surgery provides significant symptomatic benefits for the vast majority of patients, surgery is not a cure for sinusitis. Therefore, 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" surgery may be necessary to optimize your surgical outcome.

--Spinal fluid leak: Because the sinuses are located in close proximity to the brain, there is a rare chance of creating a spinal fluid leak (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 might require surgical closure and extend your hospitalization.

--Visual problems: There have been isolated reports of visual loss after sinus surgery. The potential for recovery in such cases is not good. Fortunately, such a complication is extremely rare. Double vision has also been reported following sinus surgery. Persistent tearing of the eye can result from surgery, but this problem usually resolves on its own.

--Alteration in sense of smell: Smell generally improves or stays the same after endoscopic sinus surgery. Occasionally, patients may experience a decline in their ability to smell. This is typically temporary during the healing phase after surgery.

Some patients have a deviation of the nasal septum that needs to be corrected at the time of surgery through a short procedure called a septoplasty. If you require septoplasty, there are additional risks associated with this procedure. The primary risks are bleeding or infection in the area of the septum, numbness of the upper front teeth (typically resolves on its own), the development of a hole through the septum (septal perforation), or recurrence of septal deviation. There is a very small risk that such occurrences could alter the external appearance of the nose.

#### **4. What will my activity restrictions be during the postoperative recovery period?**

For the first week following surgery you should not blow your nose. In addition, you should refrain from any strenuous activity for at least two weeks following surgery. This includes no lifting (more than 15 lbs.) or straining. Your surgeon will be able to advise you when it is safe to begin exercising again. You should plan on taking one week off from work to recover from surgery.

#### **Conclusion:**

Your surgeons at the OU Health are committed to providing you with the highest level of care in a comfortable and caring environment. We want you to have as complete an understanding as possible about your sinus condition and about our recommendations for treatment. Please feel free to ask questions about any aspect of your care and we will be happy to make sure that all of your questions have been answered.