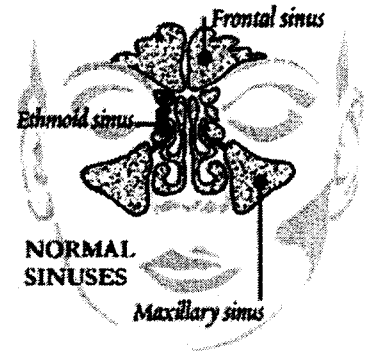


Endoscopic Sinus Surgery

What are the nasal sinuses?

The perinasal sinuses are small, paired spaces adjacent to the nasal airway. They are lined by mucosa similar to the lining of the nose and the mouth. The sinuses produce mucous which drains into the nose via narrow openings. The actual function of the sinuses is unclear.

During a cold or allergy attack, the sinuses become inflamed causing obstruction of the narrow openings into the nose. This results in a feeling of congestion and pressure in the sinuses. Continued sinus obstruction will result in a bacterial or fungal sinus infection.



What is chronic sinusitis?

When a sinus infection lasts more than three months or reoccurs frequently it is called chronic sinusitis. Severe allergies can result in nasal polyps which can also cause obstruction of the sinuses. Antibiotics, nasal steroid sprays, antihistamines, decongestants, and oral steroids can be used to treat chronic sinusitis. Salt water nasal irrigation can also be helpful. In some cases persistent sinus disease requires further treatment. Some patients may benefit from an evaluation by an allergist for possible allergy shots. Endoscopic sinus surgery is considered when medical treatments fail to alleviate chronic sinusitis or multiple episodes of acute sinus infection. A CT scan of the sinuses is generally done to provide information on the extent of the sinus disease and details of the anatomy around the sinuses.

How is endoscopic sinus surgery done?

Endoscopic sinus surgery (ESS) is done in the operating room (OR) under general anesthesia. In the Pre-Op area, the anesthesiologist will talk to you about the anesthesia and answer any questions you may have. You will receive an antibiotic through an IV, and you may also be given a decongestant nasal spray before being brought into the OR.

Once in the OR, you will receive medications through the IV to put you to sleep. The anesthesiologist will then place a tube through your mouth into your airway to help you breathe during the surgery. Local anesthesia is then injected into the mucosa lining of the nose where the sinuses drain into the nose. Endoscopes, narrow telescopes made to be used in the nose, are used throughout the surgery to see inside the nose. A variety of instruments are used to carefully remove obstructing swollen tissue and bone to open the sinuses. Depending on the structure of the nose, concurrent septum or turbinate surgery may be done. After the sinuses have been opened, small sponge sinus packs or absorbable sinus packing may be placed to keep the newly enlarged opening from narrowing. This type of sinus packing is not the same as nasal packing which obstructs nasal breathing. You will then be allowed to wake and will be taken to the recovery room. Surgery can take one to two hours depending on the extent of the surgery.

Most patients are discharged home 1-2 hours after the surgery is done. A gauze "mustache" dressing is taped under the nose to catch minor bleeding which is common after surgery and resolves by the next day. Sleeping with the head up is helpful the first week to reduce swelling from the surgery. It is important to take all prescribed antibiotics. Most patients require

prescription pain medication such as Vicodin or Tylenol with Codeine, but over-the-counter Tylenol is often enough for moderate pain. Do not lift any heavy objects and do not sneeze through the nose the first two weeks after surgery. If you have to sneeze, sneeze through an open mouth.

Most patients are seen back in the clinic one week after surgery for removal of the sinus packs. Postoperative swelling inside the nose gradually resolves over a few weeks allowing improved nasal breathing and resolution of sinus pressure. There is no bruising or swelling on the outside of the nose. Most patients return to work or school one week after surgery. Crusting in the nose the first two weeks can be helped by putting Vaseline jelly inside the nostrils. You will likely be seen in the clinic several times in the month after surgery to remove debris and crusts from the sinus openings as you are healing.

What signs of trouble should I look for after surgery?

If you have any of the following problems, call your surgeon who did your procedure:

- **Bleeding:** a large amount of bright red blood running from your nose or down the back of your throat (a nosebleed).
- **Fever:** a fever persisting above 38.3° C, or 101° F.
- **Signs of infection:**
 - an increase in pain, redness or swelling of the nose
 - a yellow or green, smelly discharge from the nose
- **Nausea:** any persisting nausea.

What are the risks of endoscopic sinus surgery?

Significant problems following sinus are unusual, but there are some risks associated with the surgery. The primary concern with patients undergoing sinus surgery is the possibility of continued sinus disease despite undergoing sinus surgery. Some patients do require revision surgery if scar tissue or polyps form to obstruct the sinuses again. Some patients continue to have sinus infections despite having open sinus passages. Symptoms from persistent sinus disease after sinus surgery could be better, similar, or worse than symptoms before surgery. There is a small risk of surgical infection which is minimized with antibiotics around surgery. The risk of persistent bleeding requiring nasal packing in the ER is very small. Serious bleeding requiring blood transfusions has been reported but is rare. Injuries to the eye during sinus surgery and even blindness have been reported but are rare. The roof of the sinuses separates the nasal cavity from the brain. Injuries to this roof resulting in brain damage, meningitis, and leakage of cerebrospinal fluid into the nose have been reported but are rare. Sinus surgery can change the resonance of the voice in subtle ways which may be important to patients who depend on their voice to make a living. Your anesthesiologist will discuss the risks of the general anesthesia.

I have read the information about endoscopic sinus surgery including risks of surgery and have been given a copy of this information sheet.

(Patient/parent signature) X _____

(Print name) _____

Date: _____