



Daniel L. Wohl, M.D., P.A.
4114 Sunbeam Rd., Suite 403
Jacksonville, FL 32257
(904) 262-7368

INSTRUCTIONS FOR PARENTS

ENDOSCOPIC SINUS SURGERY

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The following instructions are presented for your review over the next several weeks. Please understand that every child is unique and that these instructions are offered as guidelines. Every child will handle each situation differently and every parent is similarly entitled to respond uniquely to their child's needs during the recovery and postoperative period of time.

A great deal of detail has been placed in these instructions. Please refer to the index above to locate each particular category.

Thank you.

What are the “Sinuses”?

The sinuses (“*paranasal sinuses*”) are paired air filled chambers in the facial and skull bones that empty into the nose on each side. They are present at birth and continue to grow throughout childhood and into adolescence. It is felt that their main purpose is to lighten the skull - although many children (and adults, too!) might tell you that the real purpose of the sinuses is to make their life miserable.

The paranasal sinuses first form in the bones of the cheek region and between the eyes. They later extend into the bones underneath the brain and then above the eyes and into the forehead region. The inner lining of the sinuses (“*mucosa*”) makes the mucus that lubricates the sinus drainage areas. Sometimes, such as during an infection, there's too much mucus. Sometimes, such as with bad allergies, the mucus becomes very thick and polyps can form. Sometimes the problem is not with the mucus but with the inner structures (“*anatomy*”) of the nose or sinuses that prevents adequate drainage.

Why is sinus surgery performed?

Your child is having sinus surgery most likely for one or more of the following reasons:

- Long term nasal congestion
- Long term nasal drainage
- Persistent sinusitis
- Nasal Polyps

Other significant, but less common, reasons include:

- Bacterial (“pus”) collection within or around the sinuses
- *Non-sinus* complications of sinusitis

What is the Goal of Sinus Surgery?

Sinus surgery is designed to allow each sinus to fill with air naturally and to be able to drain mucus without obstruction. If there is obstruction from polyps or small drainage channels, the intent is to relieve the obstruction and allow, hopefully, normal mucosa to reline the surgically altered sinus cavity(ies.) Your ENT doctor will customize the sinus procedure for your child based on the extent of the sinus disease.



Recovery and Follow-up:

Endoscopic sinus surgery (ESS) is performed through the nose and recovery takes much less time than the older “open” techniques. ESS is generally out-patient surgery, so you most likely will take your child home the same day as the surgery, but it may take several days before your child is back to their “normal” self.

Your child’s sinuses may take several weeks to several months, or longer in some cases, for the inside healing to be complete. During that time, you may be asked to return to the office on a regular basis so that Dr. Wohl can keep the healing areas clean. On occasion, it is necessary to plan elective follow-up procedures to “clean-out” the sinuses under anesthesia.

Pain:

Pain occurs after endoscopic sinus surgery to varying degrees depending on the individual child as well as on the extent of the surgery performed. **We suggest giving pain relief with non-narcotic acetaminophen (Tylenol, Panadol, Tempra, etc.) every 4-6 hours for the first 24 hours, and then every 4-6 hours as needed.** You may have to set your alarm to get up and give the medications.

In older children, Dr. Wohl may prescribe acetaminophen with codeine or hydrocodone. **This medication is a narcotic and should NOT be used “around the clock.”** It should be given only if the plain acetaminophen does not give adequate pain relief.

Do NOT give aspirin or aspirin-like Non-steroidal anti-inflammatory medications for pain relief (Motrin, Advil, Nuprin, Ibuprofen, etc.) as these medications can inhibit the function of natural clotting factors.

Fever:

A low-grade fever for 2-3 days is not unusual after endoscopic sinus surgery. It is often a response of the lungs to general anesthesia and usually resolves with deep breathing. It may also result from the temporary build-up of nasal secretions blocking the natural sinus drainage which often responds to nasal cleansing and sometimes, if deemed necessary, to a new course of antibiotics.

Please take your child’s temperature with a thermometer if you think it is high. A temperature up to 101 degrees F is generally acceptable within three days of surgery. Remind your child to breathe deeply on a regular basis.

**Please contact us
if temperatures above 101 degrees F persist beyond 2-3 days after surgery
- OR -
if your child’s fever does not respond to medication.**



Bleeding:

Bloody “spotting” is not uncommon from one or both sides of the nose for 2-3 days after endoscopic sinus surgery. Steady bloody discharge beyond 2-3 days is unusual and should be reported to the ENT doctor.

Vomiting:

Some children may have mild nausea or occasional vomiting after endoscopic sinus surgery. This problem is often a response to general anesthesia or to any blood that was inadvertently swallowed and should resolve within one or two days. One or two episodes of vomiting is not unusual. Excessive or persistent vomiting is not expected and should be reported.

Headache, Smell and Vision Changes:

Endoscopic Sinus Surgery has become a very standard, safe procedure but complications can still occur. Since the sinuses develop around the bony eye sockets and extend underneath the brain, there is always the potential for disruption of the protective bone that may have become weakened or distorted by disease putting the adjacent vital eye and brain structures at risk.

If the contents of the eye socket are exposed there is the possibility of decreased eye movement or even blindness. If disruption of the thin tissue at the top of the nose occurs there may be a change in the sense of smell. If the lining of the brain is opened, the surrounding fluid can leak into the nose and infection can spread into the normally sterile intracranial space.

It remains an unlikely complication

– BUT –

If there are any vision or sense of smell changes,

- OR –

if there is persistent clear fluid nasal discharge,

- OR –

if an atypical headache develops

PLEASE CONTACT US IMMEDIATELY.

Activity:

We suggest restricting activity for the two-week period after surgery. The goal is to limit Valsalva inducing activities which increase the blood flow to the head. This would include restrictions on swimming, diving, and any strenuous exercising. If your child plays a wind instrument, they are also advised to refrain from practicing to limit positive pressure increases to the upper respiratory system.

Aggressive nose blowing is discouraged and, if necessary, your child should attempt to sneeze with their mouth open. The goal is to minimize the risk for bleeding or other complications.



Diet:

Your child should avoid drinking hot liquids for 48 hours following endoscopic sinus surgery. Otherwise, they can eat whatever they want.

Nasal Hygiene:

It is important to keep the healing areas moist. Your ENT doctor may recommend warm salt water irrigation (“hypertonic saline”) or “balanced saline” nasal spray/mist usage. If nasal packing (“stents”) were placed during surgery and they should fall out, this is usually not a major problem. Simply call our office to let us know. More aggressive and extensive nasal irrigation may begin on a daily basis once the nasal stents are no longer in place or are dissolving away.

If your child has been on a topical nasal steroid or antihistamine spray, you can usually resume this medication after two weeks. If your child is on asthma medications, including inhalers, you can usually resume these medications beginning the day after surgery.

Discharge to Home:

In general, the timing of your child’s “discharge to home” from the hospital is determined by the parent(s) level of comfort of postoperative care.

- IF...**
- a) your child is breathing spontaneously,
 - b) there is no evidence of postoperative bleeding,
 - c) their oral intake is baseline satisfactory, and
 - d) there is no excessive nausea or vomiting,

THEN... there are no general restrictions to discharge. When you feel you are capable of handling the postoperative care, discuss this with your nurse as they can prepare you and your child for discharge.

Medications:

You will most likely receive prescriptions and recommendations to use one or more of the following medications during the immediate post-operative period:

- **Oral Antibiotic:** This should be taken as directed for at least several days and helps reduce the chance for the development of a secondary infection.
- **Acetaminophen with codeine or hydrocodone:** As previously indicated, this pain relief medication is not to be used more than every four hours. It should be considered as an intermittent supplement to non-narcotic (plain) acetaminophen and used only as needed to help bring pain under better control.



- **Nasal Steroid Spray:** Most children who undergo sinus surgery are on, or have been on, a nasal steroid spray. These medications help reduce local swelling and we encourage their use during the healing process usually beginning after the first 1-2 weeks.
- **Nasal Decongestant Spray:** We recommend using a topical spray, such as Afrin Nasal Spray (oxymetazoline), an “over-the-counter” medication, twice a day for three days to help limit bloody discharge.
- **Oral Expectorant (“mucolytic agent”):** This now “over-the-counter” medication can help keep your child’s mucus thin, reducing the change for mucus build-up in the healing areas. A common form is Mucinex (guaifenesin).
- **Saline Spray:** Moisture is a key component to successful healing after sinus surgery. We suggest the use of saline mist or hypertonic saline solutions at least twice a day, with gradual increasing intensity after the first week.

Follow-Up Appointment:

If a post-operative appointment has not already been made, please call our office within one or two days following surgery so that a convenient postoperative appointment can be scheduled. If there is non-absorbable nasal packing, the routine postoperative follow-up examination is usually scheduled within one week after surgery. If your child requires a sinus “clean-out” procedure under anesthesia, this may have already been scheduled. If not, and it has been recommended, please call our office as soon as possible so that we may begin to make those arrangements for you.

Telephone Instructions:

We encourage you to contact our office between 8:30am and 4:30 pm, Monday through Thursday, or until 2pm on Fridays, for routine or urgent questions, if possible. If you have “after hours” or emergent questions, please call (904) 262-7368 and follow the voice prompts to reach Dr. Wohl (extension 230) or the on-call physician.

Thank you for entrusting us with the care of your child.

