



School of Medicine

Department of Otolaryngology-Head and Neck Surgery

SINUSITIS AND FUNCTIONAL ENDOSCOPIC SINUS SURGERY IN CHILDREN

What is sinusitis?

Sinusitis is an illness in which your child has inflammation or infection of one of the sinuses that drains into the nose. This may occur in the sinuses located between or below the yes, or in older children, the sinuses in the forehead or behind the nose.

Sinusitis is caused by blockage of the natural drainage of the sinuses into the nose. Anything which causes swelling of the lining of the nose, including a cold, flu, allergy, or bacterial infection, may be responsible. Blockage may also occur from polyps, which may be caused by allergies or chronic infection.

Once blockage of the natural drainage passageways has occurred, mucous builds up and leads to inflammation and eventually infection. This is sinusitis, with symptoms of runny nose cough, nasal congestion, fever, and facial tenderness.

How is sinusitis diagnosed?

Your doctor will diagnose sinusitis based mostly on your child's history. You will be asked if your child has a nasal congestion, runny nose, yellow-green nasal discharge, bad breath, headache, swelling around the eyes, or frequent sneezing. Other symptoms of sinusitis may include pressure, pain, fever and tenderness of the cheeks or between the eyes. If your child suffers from asthma, the asthma may become worse during episodes of sinusitis.

Most children's acute sinusitis resolves on its own, however, some children need antibiotics for up to 2-3 weeks to get better. Another group of children get repeat bouts of acute sinusitis requiring repeat treatments with antibiotics. When children suffer from symptoms which persist for more than 3 months, this generally indicates chronic sinusitis, where the symptoms are usually less severe, but last longer than acute sinusitis. Chronic sinusitis may be related to your child's underlying allergies, a longstanding illness, or structural anomalies of a child's sinuses.

How will the doctor treat sinusitis?

As the first line of treatment your doctor will probably give your child an antibiotic and possibly a steroid course for a few weeks to clear the sinus infection. Saline irrigations, nasal mucous thinning agents, allergy treatment or nasal steroid sprays may also be prescribed. If your child has acute sinusitis, symptoms should clear within the week. If the symptoms should continue, you should call your doctor. After the first week of treatment, your child will often seem much better; however, you should continue the antibiotic therapy for the full course.

If your child has sinusitis which seems to be linked to an allergic condition and your child is over the age of 2, your doctor may decide to involve an allergy specialist so that the underlying allergy may be treated.

When does a doctor decide to do surgery?

If your child has had multiple sinus infections over the past several years or has longstanding chronic sinusitis, which does not seem to go away completely with antibiotics, your doctor may recommend surgical treatment for the sinusitis. For children under 6 years of age, an adenoidectomy is usually the first surgical treatment for sinusitis. For older children, sinus surgery is performed using telescopes which are placed through the nose. This helps the doctor to open the natural drainage pathways of your child's sinuses under direct vision, a technique called functional endoscopic sinus surgery (FESS). This allows for drainage of the mucous from the sinuses and thus reduces the risk of infection. Before endoscopic sinus surgery, a CT scan will be performed to see how your child's sinuses are formed and how big they are.

What risks are there with endoscopic sinus surgery?

Endoscopic sinus surgery involves operating on your child's sinuses through the nose using small telescopes. Ear, nose and throat specialists are experts in the anatomy of your child's nose and sinuses. After the surgery, your child may have some bleeding, crusting or continued nasal stuffiness until the lining of the sinuses heals. Because some of the sinuses are located next to the eyes, your child can have some bruising or puffiness around the eyes after surgery. It is very rare for there to be any significant injury to the eye. Your doctor will talk to you about possible risks or complications of this surgery.

Under some circumstances, approximately 2-3 weeks after surgery, your child may be scheduled to return to the operating room for another examination under anesthesia. This will allow the doctor to clean out any crusting and evaluate the area where the surgery was performed to make sure it is healing properly.

Symptoms of sinusitis:

- Yellow or green nasal discharge
- Fever
- Cough (especially at night)
- Bad breath
- Headache
- Localized facial pain
- Tenderness to pressure on the cheeks and forehead
- Swelling around the eyes
- Frequent attacks of sneezing with nasal discharge
- Recurrent cold
- Nasal obstruction

PLEASE CALL IF YOU HAVE ANY QUESTIONS! Office phone number 314-454-6162 / Monday - Friday 8:30 AM – 4:30 PM Keiko Hirose, M.D. David Molter, M.D. Judith Lieu, M.D., MSPH Allison Ogden, M.D. David Leonard, MBBCh Maithilee Menezes, M.D.