Sinusitis

Sinusitis is an infection of the sinuses, the air spaces behind the nose, below the eyes and the forehead. Sinusitis usually occurs after a cold. When sinusitis is caused by infection with bacteria, antibiotics can be helpful.

What is sinusitis?

Sinusitis is a common infection in children and adolescents, occurring after up to 2% of colds. The sinuses drain into the nose. Swelling in the nose can block the sinus openings and not allow drainage, resulting in sinus infection. When sinus infection is caused by bacteria, treatment with antibiotics is often recommended.

What does it look like?

- Bacterial sinusitis often develops after a cold. Symptoms such as runny or stuffy nose and cough may get worse after 5 to 7 days or fail to improve by 10 days.
- Cough is often present.
- Fever may develop after the first few days of a cold.
- Pus or thick, cloudy mucus may be coming from the nose.
- In teens and adults, sinusitis often causes headache or facial pain. These symptoms are less common in children.
- In children, sinusitis may occur in conjunction with middle-ear infection (otitis media).
- Other possible symptoms include bad breath, reduced sense of smell, or swelling of the face, especially around the eyes.

Symptoms can become severe, with a high fever and puslike mucus coming from the nose. *If your child has these symptoms, call our office.*

What causes sinusitis?

The sinuses can become infected with the same viruses that cause the common cold. Viral infection of the sinuses usually causes no serious problems, as the infection clears up on its own.

However, the sinuses can become blocked during a cold, which increases the chances that infection with bacteria will occur. Bacterial sinusitis is less common than viral sinusitis but may require antibiotic treatment.

What are some possible complications of sinusitis?

Sinusitis may become a chronic problem, with symptoms such as a runny, stuffy nose and a cough lasting for several weeks or months.

- Although this is relatively uncommon, the infection can spread from the sinuses to other locations.
 - Although it is uncommon, infection can quickly spread to the area around the eyes (periorbital cellulitis) or even inside the eye socket (orbital cellulitis). *If your child develops swelling and redness of the skin around the eyes, eye pain, a change in vision, or difficulty moving his or her eyes, get medical care immediately.*
 - Rarely the infection can also spread to the bones of the skull, the inner lining of the skull, or even the brain itself.

What puts your child at risk of sinusitis?

- Colds, which are more common in the winter months and in children who attend day-care centers.
- Allergic rhinitis (hay fever) or asthma.
- Exposure to secondhand smoke at home.
- Repeated sinus infections may be related to allergies, problems with the immune system, or physical problems in the nose, such as a polyp.

Can sinusitis be prevented?

- The best way to prevent sinusitis is to try to avoid colds; having your child wash his or her hands frequently may be the best prevention.
- Getting a yearly influenza vaccination ("flu shot") may help to avoid sinusitis. However, sinusitis is more often related to colds than to the flu.

How is sinusitis treated?

- Antibiotics such as amoxicillin are the usual treatment for bacterial sinusitis. If your child is allergic to penicillin, other antibiotics can be used. Antibiotics are often given in the hope of helping your child feel better and preventing complications.
- Make sure your child takes the full dose of antibiotics prescribed; don't stop giving your child the medication just because he or she seems to be feeling better.

- Decongestants, nasal sprays, and other "over-the-counter" medications are often used for sinusitis but may not be very helpful. Don't use nasal decongestants for more than 3 to 5 days, as symptoms may get worse after treatment stops.
- Pain relievers (such as acetaminophen or ibuprofen) may help if your child is having headaches or facial pain.
- If the infection doesn't get better within a week, we may change your child's antibiotic treatment, order x-rays, or recommend a visit to an otolaryngologist (an ear, nose, and throat specialist).
- If your child's sinus infection is severe or if it seems to have spread, we may recommend putting him or her in the hospital, starting intravenous antibiotics, or seeing the otolaryngologist.

When should I call your office?

Call our office if:

• Your child's symptoms (for example, pus and fluid coming from the nose, headache, or facial pain) don't get better after 1 week.

- Your child's symptoms get worse (such as severe headache, vomiting, or high temperature).
- Your child's fever disappears and then returns.

If your child develops any of the following signs of spreading infection, get medical care immediately:

- Redness of the skin around the eyes.
- Outward displacement (bulging) of the eye, or double vision.
- Confusion; not acting like himself or herself.
- Eye pain, a change in vision, or difficulty moving the eyes.
- Severe or worsening headache.
- Neck stiffness.