
SINUSITIS

Have you ever felt like you had a cold that wouldn't go away? If symptoms of discolored nasal drainage and blockage hang around for more than 10 days, or worsen after they start getting better, there's a good chance you have sinusitis, an infection or inflammation of the sinuses.

Sinuses are hollow spaces in the bones around the nose that connect to the nose through small, narrow channels. Sinusitis, also called rhinosinusitis because the symptoms involve both the nose and the sinuses, affects about one in eight adults annually. For many, the inflammation starts when viruses or bacteria infect your sinuses (often during a cold), and begin to multiply. Part of the body's reaction to the infection causes the sinus lining to swell, blocking the channels that drain the sinuses. This causes mucus and pus to fill up the nose and sinus cavities. For others, the symptoms and inflammation may be the result of the nose and sinuses reacting to other things in the environment, but not be an infection.

Acute vs. Chronic Sinusitis

Because sinusitis simply means inflammation of the sinuses, the word alone includes a variety of similar problems. Acute sinusitis is when the symptoms occur for less than four weeks. A diagnosis of chronic sinusitis requires that the symptoms last longer than 12 weeks. Sometimes these are caused by the same thing, but often chronic and acute sinusitis are very different from each other. Your primary care provider or an ENT (ear, nose, and throat) specialist, or otolaryngologist, can help sort out what type of sinusitis you have and how to treat it. Recurrent acute sinusitis is when someone has four or more sinus infections (acute sinusitis) in one year but does not have symptoms in between those infections.

WHAT ARE THE SYMPTOMS OF SINUSITIS?

You have **acute sinusitis** when you have had cloudy or

colored drainage from your nose for up to four weeks, plus one or more of the following symptoms:

- Stuffy, congested, or blocked nose
- Pain, pressure, or fullness in the face, head, or around the eyes
- Long-lasting cold symptoms
- Symptoms that do not improve within 10 days of getting sick, or initially get better then worsen again

You might have **chronic sinusitis** if you have at least two of the four symptoms note below for at least 12 weeks. An ENT specialist would also need to see polyps, pus, or thickened mucous in nose, or get a CT scan, to fully diagnose chronic sinusitis. Possible symptoms include:

- Stuff congested, or blocked nose
- Pain, pressure or fullness in the face, head or around the eyes
- Thickened nasal drainage
- Loss of smell

WHAT CAUSES SINUSITIS?

Viruses or bacteria usually cause acute sinusitis. Acute viral sinusitis is likely if you have been sick for less than 10 days and are not getting worse. Acute bacterial sinusitis is when you do not improve at all within 10 days of getting sick, or when you get worse within 10 days after beginning to get better.

Chronic sinusitis, however, is usually caused by prolonged inflammation, instead of a long infection. Infection can be a part of chronic sinusitis, especially when it worsens from time to time, but is not usually

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the main cause. The exact cause cannot always be determined; for some reason the nose and sinuses are overreacting to what they think is an infection.

Are There Any Related Conditions or Complications?

Migraine headaches or tension headaches can cause symptoms of sinus pain or pressure. If you have sinus headaches without discolored drainage, talk to your primary care provider, or an ENT specialist, about the possibility of migraine headaches causing sinus pain or pressure and medications options for migraine treatment. Sometimes inflammation of the nasal cavity can also cause drainage and nasal congestion, but not involve your sinuses.

WHAT ARE THE TREATMENT OPTIONS?

Sinusitis is treated differently based on the cause. Most cases of acute sinusitis, about 98 percent, are caused by a virus, not bacteria, and should not be treated with antibiotics. Acute viral sinusitis may be treated using pain relievers such as acetaminophen or ibuprofen, steroid nasal sprays, or salt water irrigation in the nose. These treatments are also good options for acute bacterial sinusitis. Most people get better naturally from acute bacterial sinusitis, called “watchful waiting,” but some patients with acute bacterial sinusitis may get better faster with an antibiotic.

Chronic sinusitis is treated differently than acute sinusitis. Because chronic sinusitis is caused more by inflammation than infection, the treatments for chronic sinusitis aim to control the inflammation. Salt water nasal irrigation and/or nasal steroid sprays are the main treatments for the symptoms of chronic sinusitis. Antibiotics may sometimes be helpful but not always.

Other factors, including allergies, nasal polyps, asthma, and problems with the body’s ability to fight infections, can go along with sinusitis and make it worse unless they are also treated.

X-rays or CT scans of the sinuses are not necessary to diagnose uncomplicated sinusitis if you have the symptoms of sinusitis (discharge plus pressure or blockage). If your doctor suspects a complication or if you have repeated episodes or prolonged sinus symptoms, a CT scan of your sinuses may be needed.

Surgery

Surgery is not recommended for acute sinusitis except in rare circumstances. Sometimes the sinus infection can spread to the eye, face, or brain; this would be considered an emergency, and surgery may be needed to reverse the infection and keep it from spreading.

For chronic sinusitis, surgery is an option when the symptoms cannot be controlled with medications and other treatments. The most common type of surgery for the sinuses is called endoscopic sinus surgery; a pencil-sized scope (endoscope) is used to see inside the nose and sinuses and guide the surgery. The surgery widens the natural drainage pathways between the sinuses and the nose, allowing mucus to get out of the sinuses and air to get in. Medications that are delivered into the nose and sinuses, like sprays and irrigations, can also get into the sinuses better after surgery.

Balloon sinus ostial dilation (BSOD) is a newer treatment option where an endoscope is also used, but instead of carefully removing the bone and tissue that may be blocking a sinus, a balloon is used to make the sinus openings bigger. Balloon dilation may not be appropriate for every type of chronic sinusitis and cannot be used on all of your sinuses, but can be helpful depending on your circumstances.

WHAT QUESTIONS SHOULD I ASK MY DOCTOR?

1. Do I have a bacterial infection?
2. Do I need to take antibiotics if I have acute bacterial sinusitis?

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3. Should I get an X-ray or CT scan of my sinuses when I have sinusitis?
4. What else could be causing my symptoms?

References

Diagnosis of acute sinusitis: http://www.entnet.org/sites/default/files/uploads/PracticeManagement/Resources/_files/adult-sinusitis-patient-info-diagnosis-of-sinusitis.pdf

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