

Title: Acute Sinusitis

Author: Andrew Day

Date: 3.31.10

Key words: acute, sinusitis, antibiotics, nasal discharge, purulence, facial pain, prolonged symptoms, fever, nasal congestion, cough

Abstract: Acute sinusitis is inflammation of the skin lining your sinuses - the airspaces in your facial bones around your nose. The disease is most often due to the common cold and as a result, treatment is usually for symptoms only. Antibiotics have been shown to help a minority of people recover from the simple form of the disease, but are associated with adverse effects.

This document was created by a medical student enrolled in the Primary Care Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.

THE DOCTOR SAYS I DON'T NEED ANTIBIOTICS BUT I WANT THEM!

Most people will recover from acute sinusitis on their own. That's because most cases of acute sinusitis are caused by viruses, most of which we can't kill.

One very big study showed that a small portion of patients with regular acute sinusitis will benefit from antibiotics. In the majority of cases though, patients will get better within two weeks whether or not they received antibiotics. The study also suggested that antibiotics might speed up recovery; it guesses that they don't actually CURE more people.

Using antibiotics when they are not needed can be dangerous in two ways. For one, it can contribute to resistance. The more bugs are exposed to drugs that try to kill them, the harder they try to evolve new ways to survive that drug. If successful, these drug-resistant bugs can spread and they will be harder to treat. The other reason to avoid antibiotics is that they can negatively affect you. They have side effects!

That said, there are many instances in which antibiotics need to be used to treat acute sinusitis. Look inside the brochure to refresh your memory!

WHAT ELSE SHOULD I KNOW?

Acute sinusitis can develop into diseases that are much more dangerous. This is rare, but it can happen. Make sure to see your doctor if you have fevers with neck stiffness and confusion; swelling, warmth and tenderness around your eye, bone pain and tenderness around your nose; and any localized areas of weakness.

Acute Sinusitis



Produced by Andrew
Day, MS4
PCC – Family
Medicine Clerkship

UNIVERSITY OF MINNESOTA
PRIMARY CARE CLERKSHIP
PATIENT EDUCATION TOOL

WHAT IS ACUTE SINUSITIS?

Acute sinusitis is characterized by “inflammation” of the sinuses – the hollow airspaces in your facial bones surrounding your nose. When your sinuses become “inflamed”, the tissue lining these spaces can become warm, red, swollen, and painful. When this happens, mucous has a hard time draining out of your sinuses and into your nose – where you can blow the mucous into a tissue! Blocked sinuses create a great environment for infectious bugs to grow.

WHAT CAUSES ACUTE SINUSITIS

- Viral infection: usually the common cold
- Bacterial infection:
- Fungal infection: usually occurs in people whose immune systems don't work right

Several other health problems will make you more likely to get sinus infections. These include allergies, nasal passage abnormalities (eg a deviated septum), whole body diseases (eg cystic fibrosis), and regular exposure to irritants like cigarette smoke.

HOW WILL I KNOW IF I HAVE IT?

Some symptoms you may notice if you have acute sinusitis include:

- Thick yellow/green discharge from your nose and/or throat
- Swelling, pain, tenderness and pressure in the areas of the man's face above
- Difficulty breathing through your nose or reduced sense of smell
- Cough
- Fever
- Bad breath
- Toothache

If you have a fever or a few symptoms above that don't get better after a few days, you should go see your doctor.



I AM MISERABLE. WHAT MEDICATIONS WILL HELP ME?

Generally speaking, doctors like to divide patients with acute sinusitis into two categories: people with a low probability of bacterial infection and people with a high probability of bacterial infection. Knowing a patient's “probability” helps the doctor decide whether or not to treat a patient's symptoms only or to treat the symptoms and give antibiotics – drugs that kill bacteria.

Patients with two or more of these symptoms are placed in the high probability group:

- Head cold symptoms for more than a week
- Facial pain
- Yellow/green discharge from the nose/throat

These patients usually get antibiotics. Doctors use amoxicillin, augmentin, bactrim, and azithromycin most often.

Patients who have one or fewer of the above symptoms can use salt water sprays or salt water sinus flushes if they want. They may also benefit from decongestants, medications that help with congestion; anti-inflammatory agents, medications that decrease swelling, tenderness, and redness; and pain relievers like Tylenol.