

Family Medicine Clerkship Plain Language Summary

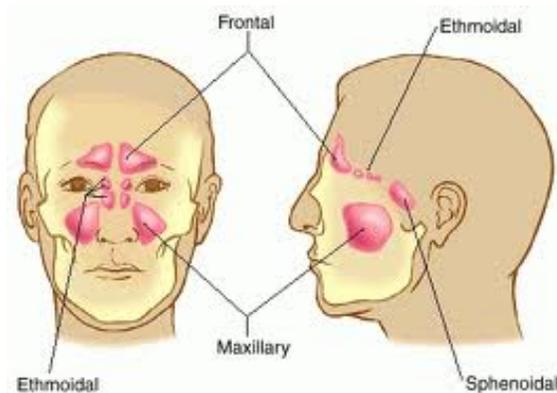
Title: Antibiotic use for treatment of acute sinusitis.

Name: Carin Martinson

Plain Language Summary:

Infections may be caused by viruses or bacteria; more often it is a virus that causes the common cold and sinus infections. Antibiotics do not treat viral infections. However, more than one infection can be present at the same time, one viral and the other bacterial. Bacterial infections are best treated with antibiotics. It is difficult to know which infections are viral or bacterial. Therefore, it is hard to know when it is necessary to use an antibiotic. We don't want to overuse antibiotics because some of them have side effects such as upset stomach and diarrhea, and with over use of antibiotics the bacteria are getting stronger and don't always respond to the antibiotic, this is called resistance.

In sinusitis the sinuses are infected which often causes symptoms such as pain and discharge from the nose. Sinusitis is a very common reason for people to go see a doctor. There are different sinuses in the head that can be involved in acute sinusitis; they are the maxillary, frontal, ethmoidal and sphenoidal sinuses.



This paper reviewed 59 studies that used a variety of antibiotics or a placebo for treatment of a sinus infection in an otherwise healthy person. Six studies compared antibiotics to placebo (a sugar pill) and found most participants got better within two weeks, regardless of whether they received the antibiotic or not. When antibiotics were given people felt better sooner. 53 studies compared different antibiotics, and found no antibiotic to be better than the others; they were very equal in their effectiveness in treating acute sinusitis. The small benefit of antibiotics may not outweigh the negative effects, such as skin rash, diarrhea, abdominal pain, vomiting, and risk of increased resistance to antibiotics.

The conclusion is antibiotics did help some patients, but did not make a huge difference for most people with acute maxillary sinusitis. 90% improvement rate in the group treated with antibiotic, and 80% in the groups with placebo.

Additional Resources:

Google Health

<http://google-health.com/>

NGC – National Guideline Clearinghouse

<http://guideline.gov/>

Medline Plus:

<http://www.nlm.nih.gov/medlineplus/>

MN Department of Health

<http://www.health.state.mn.us/>

United States Preventative Service Task Force (USPSTF)

<http://www.ahrq.gov/clinic/uspstfix.htm>

WebMD

<http://www.webmd.com/>

Key Words:

Acute sinusitis

Antibiotics

Infection

Maxillary

Sinus

Sinusitis

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