

Family Medicine Clerkship Plain Language Summary

Title: Sore throat in children and antibiotics

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Plain Language Summary:

Children often get sore throat, which is also known as pharyngitis. Most sore throat is caused by viruses like the one that causes the common cold and flu. Less often, bacteria can also cause sore throat. The most common bacteria to cause sore throat are Group A Streptococcus (GAS). Some people refer to this throat infection as strep throat.

Common signs and symptoms along with sore throat include fever, large lymph nodes in the neck, and white spots on tonsils. Antibiotics are used to treat sore throat infections caused by GAS. If not treated, sore throat caused by GAS can lead to a more severe disease called rheumatic fever, which may cause damage to the joints, the heart, and skin.



To see if the cause of the sore throat is GAS, a Rapid Strep Test is performed which involves a medical provider placing a cotton swab in the back of the throat and then having that sent to the lab. The results of the Rapid Strep Test take only a few minutes to be available. If the Rapid Strep Test is positive, then it is very likely that the patient has a bacterial infection and will need antibiotic medications. If the results are negative, then it is not as likely that the patient has a bacterial infection and the cause of the sore throat will be something else. However, if a physician has a high suspicion that a patient has strep throat, then the throat sample from the cotton swab can be

grown in a lab to confirm if a child truly has bacterial infection. The results from this process are available in 24 to 48 hours.

The first choice antibiotic used to treat sore throat caused by bacteria is penicillin, which can be given as a pill for 10 days or as a single injection into the muscle. Children that have a difficult time taking pills could benefit from a single injection of penicillin. Penicillin injection is very safe and the most common issue is discomfort at the site of injection. Other antibiotics can be used as well, such as amoxicillin, which comes in a chewable tablet or in liquid form. Its taste is tolerable to most children. Nausea, vomiting, diarrhea, and rash are few of the side effects associated with amoxicillin. Studies indicate that amoxicillin needs to be taken for 10 days to be as effective as penicillin injection in treating strep throat.



Strep throat can be spread to other people. The bacteria are contained within saliva or secretions from the nose of someone who has strep throat. Ways to prevent spread of strep throat is to avoid sharing food or drinks, washing of hands more regularly, and covering of mouth when sneezing or coughing. Children should not return to school until 24 hours after starting their antibiotics. Currently, there is no vaccination to prevent strep throat.

Additional Resources:

Other resources that may be useful are:

WebMD – Strep Throat Overview

<http://www.webmd.com/oral-health/tc/strep-throat-topic-overview>

Mayo Clinic – Strep Throat

<http://www.mayoclinic.com/health/strep-throat/DS00260>

National Center for Biotechnology Information: PubMed Health – Diseases and Conditions

<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001663/>

Key Words:

sore throat

strep throat

streptococcal pharyngitis

antibiotics

penicillin

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