

Family Medicine Clerkship Plain Language Summary Template

Title: Strep test: Could it decrease unnecessary antibiotic use?

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Plain Language Summary:

What is strep throat?

Strep throat is infection of the throat in people of all ages. However, it is common in children compared to adults. The infection causes the inflammation of the throat known as pharyngitis and can make your throat feel scratchy and sore. Most commonly viruses cause throat infection but usually their symptoms resolve on their within a week. In comparison, strep throat symptoms are more severe and require antibiotic treatments. If left untreated, the strep throat can lead to more problems such as kidney inflammation and rheumatic fever. It is important to identify strep throat and appropriately treated to avoid the complications.

What are the symptoms?

Symptoms of strep throat can start within days and often include sore throat that is painful with swallowing, or dysphagia. It can also lead to swollen tonsils. Sometimes the tonsils can develop exudes or white patches or pus. In addition, it cause adenopathy or swollen glands in your neck or jaw and palatine petechie or red spots the back of the mouth. Moreover, you can have fever, headaches, develop rash and feel tired. Children can develop belly pain, vomiting or have decreased appetite.

What causes strep throat?

An organism called group A streptococcus, or *Streptococcus pyogenes* causes the majority of bacterial throat infections. It is highly contagious and commonly transmitted from infected person to other people by saliva or fluids from the nose or mouth (when coughing or sneezing).

How is strep diagnosed?

If you have many signs and symptoms, it is most possibly viral origin. But the symptoms also can be from bacterial infection and it's important to correctly identify and treat with medications. Often times doctors use Centor criteria (history of fever, swollen or tender lymph nodes of the neck, tonsillar exudates and absence of cough) to identify the how likely that the sore throat is due to a bacterial infection. This is criteria is not very reliable to base treatment on. The preferred method of diagnosis is using throat culture, however this takes two days to return. However, doctors can order specific strep test called Rapid

Antigen Detection Test (RADT) and this identifies strep quickly and efficiently. This test requires swabbing the back of your throat and can be done within minutes. Because the test is highly specific, it minimizes unnecessary use of antibiotics.

How is strep throat treated?

Once your doctor identifies the organism on RADTs or throat culture, diagnosis of “strep throat” is made. There are a number of antibiotics that effectively kill the bacteria in your throat. Your doctor can treat you with medication called penicillin, which is taken for 10-day course. This medication is very cheap and has less bad side effects. Doctors also use antibiotic called amoxicillin, which has a better taste when swallowed and it also very effective. Other antibiotics can also be used if you have penicillin allergies.

What are the complications?

The strep throat is not a dangerous infection in and of itself. It leads to more serious complications if not treated properly. The complications of untreated strep throat often result from the spread of the bacteria from the site of the throat to adjacent structures. It can lead to your sinus, tonsils, or the middle ear infection. It also causes a bacteremia or blood stream infections. It has the potential to cause generalized body rash called scarlet fever, kidney infection and/or rheumatic fever (RF). The RF causes infection of the heart valves or inflammation of the brain.

Additional Resources:

For more information visit:

Strep Throat: Mayo Clinic

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

Strep throat: Medline Plus

<http://www.niaid.nih.gov/topics/strepthroat/Pages/Default.aspx>

Key Words:

Rapid strep test

Strep throat

Sore throat

Strep pharyngitis

Streptococcal infection

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