# Strep throat

## **Definition**

Strep throat is caused by Group A *Streptococcus* bacteria. It is the most common bacterial infection of the throat.

## **Alternative Names**

Pharyngitis - streptococcal; Streptococcal pharyngitis

### **Causes**

Strep throat is most common in children between the ages of 5 and 15, although it can happen in younger children and adults. Children younger than 3 can get strep infections, but these usually don't affect the throat.

Strep throat is most common in the late fall, winter, and early spring. The infection is spread by person-to-person contact with nasal secretions or saliva, often among family or household members.

People with strep throat get sick 2-5 days after they are exposed. The illness usually begins suddenly. The fever often is highest on the second day. Many people also have sore throat, headache, stomach ache, nausea, or chills.

Strep throat may be very mild, with only a few of these symptoms, or it may be severe. There are many strains of strep. Some strains can lead to a scarlet fever rash. This rash is thought to be an allergic reaction to toxins made by the strep germ. On rare occasions, strep throat can lead to rheumatic fever if it is not treated. Strep throat may also cause a rare kidney complication.

## **Symptoms**

Difficulty swallowing
Fever that begins suddenly
General discomfort, uneasiness or ill feeling
Loss of appetite
Nausea
Rash

Red throat, sometimes with white patches

Sore throat

Tender, swollen lymph nodes in the neck

Additional symptoms that may be associated with this disease:

Abnormal taste

Headache

Joint stiffness

Muscle pain

Nasal congestion

Nasal discharge

Neck pain

#### **Exams and Tests**

A throat swab can be tested (cultured) to see if strep grows from it. A rapid test is quicker, but misses a few of the cases. Negative rapid tests should be followed by a culture, to find all the cases that might have been missed.

### **Treatment**

Be aware that most sore throats are caused by viruses, not strep. Sore throats should only be treated with antibiotics if the strep test is positive. Strep cannot be accurately diagnosed by symptoms or a physical exam alone.

Even though strep throat usually gets better on its own, antibiotics are taken to prevent rare but more serious complications, such as rheumatic fever. Penicillin or amoxicillin has been traditionally recommended and is still very effective. There has been resistance reported to azithromycin and related antibiotics.

Most sore throats are soon over. In the meantime, the following remedies may help:

Drink warm liquids. Honey or lemon tea is a time-tested remedy.

Gargle several times a day with warm salt water (1/2 tsp of salt in 1 cup water).

Drink cold liquids or suck on popsicles to soothe the sore throat.

Suck on hard candies or throat lozenges. This is often as effective as more

expensive remedies, but should not be used in young children because of the choking risk.

Use a cool-mist vaporizer or humidifier to moisten and soothe a dry and painful throat.

Try over-the-counter pain medications, such as acetaminophen. Do NOT give aspirin to children.

# **Outlook (Prognosis)**

The probable outcome is good. Nearly all symptoms resolve in one week. Treatment prevents serious complications associated with streptococcal infections.

# **Possible Complications**

Ear infection

**Sinusitis** 

Mastoiditis

Peritonsillar abscess

Rheumatic fever

Glomerulonephritis

Scarlet fever

## When to Contact a Medical Professional

Call if you develop the symptoms of strep throat, whether or not you think you were exposed to someone with strep throat. Also, call if you are being treated for strep throat and are not feeling better within 24 - 48 hours.

## **Prevention**

Most people with strep are contagious until they have been on antibiotics 24 - 48 hours. Thus, they should stay home from school, daycare, or work until they have been on antibiotics for at least a day.

Get a new toothbrush after you are no longer contagious, but before finishing the antibiotics. Otherwise the bacteria can live in the toothbrush and re-infect you when the antibiotics are done. Also, keep your family's toothbrushes and utensils separate, unless they have been washed.

If repeated cases of strep still occur in a family, you might check to see if someone

is a strep carrier. Carriers have strep in their throats, but the bacteria do not make them sick. Sometimes, treating them can prevent others from getting strep throat.

### References

This article uses information by permission from Alan Greene, M.D., © Greene Ink, Inc.

Alcaide ML, Bisno AL. Pharyngitis and epiglottitis. *Infect Dis Clin North Am*. 2007;21:449-469.

Del Mar C, Glasziou PP, Spinks A. Antibiotics for sore throat. Cochrane Database Syst Rev. 2006 Oct 18;(4):CD000023.

Institute for Clinical Systems Improvement. Health care guideline: Diagnosis and treatment of respiratory illness in children and adults. February 2008. Acessed November 9, 2008.

Review Date: 3/14/2009

Reviewed By: Linda Vorvick, MD, Family Physician, Seattle Site Coordinator, Lecturer, Pathophysiology, MEDEX Northwest Division of Physician Assistant Studies, University of Washington School of Medicine; and Neil K. Kaneshiro, MD, MHA, Clinical Assistant Professor of Pediatrics, University of Washington School of Medicine. Also reviewed by David Zieve, MD, MHA, Medical Director, A.D.A.M., Inc.



A.D.A.M., Inc. is accredited by URAC, also known as the American Accreditation HealthCare Commission (www.urac.org). URAC's accreditation program is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for standards or quality and accountability. A.D.A.Wi. is almong the first to define the deficiency, editorial process and online health information and services. Learn more about A.D.A.M.'s editorial policy, editorial process and quality privacy policy. A.D.A.M. is also a founding member of Hi-Ethics and subscribes to the principles of the Health on the Net Foundation (www.hon.ch).

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed medical professional should be consulted for diagnosis and treatment of any and all medical conditions. Call 911 for all medical emergencies. Links to other sites are provided for information only -they do not constitute endorsements of those other sites. © 1997- A.D.A.M., Inc. Any duplication or distribution of the information contained herein is strictly prohibited.

## **Special Instructions:**

Copyright © Nidus Information Services 2010

Copyright © 2010 Elsevier Inc. All rights reserved. - www.mdconsult.com