Sore Throats: Causes and Cures

Sore throat is one of the most common of medical complaints. As many as one out of every 10 Americans develops a "strep throat" every year, and 40 million adults will see a doctor for it.

What Causes A Sore Throat?

Sore throat is one symptom of an array of different medical disorders. Infections cause the majority of sore throats, and these are the sore throats that are contagious (can be passed from one person to another). Infections are caused by either viruses (such as the "flu," the "common cold" or mononucleosis) or bacteria (such as "strep," mycoplasma or hemophilus).

The most important difference between viruses and bacteria is that bacteria respond well to antibiotic treatment, but viruses do not.

Viruses: Most viral sore throats accompany the "flu" or a "cold." When a stuffy/runny nose, sneezing, and generalized aches and pains accompany the sore throat, it is probably caused by one of the hundreds of known viruses. These are highly contagious and cause epidemics in a community, especially in the winter. The body cures itself of a viral infection by building antibodies that destroy the virus, a process that takes about a week.

Sore throats accompany other viral infections such as measles, chicken pox, whooping cough, and croup. Canker sores and fever blisters in the throat also can be very painful.

One special viral infection takes much longer than a week to be cured: infectious mononucleosis or "mono." This virus lodges in the lymph system, causing massive enlargement of the tonsils (with white patches on their surface) and swollen glands in the neck, armpits and groin. It creates a severely sore throat, sometimes causes serious difficulties breathing, and can affect the liver, leading to jaundice (yellow skin and eyes). It also causes extreme fatigue that can last six weeks or more.

"Mono" is a severe illness in a teenager or young adult, but it is less severe in a child. Since it can be transmitted by saliva, it has been nicknamed the "kissing disease." However, it can also be transmitted from mouth to hand to mouth, or by sharing of towels and eating utensils.

Bacteria: "Strep throat" is an infection caused by a particular strain of streptococcus bacteria. This infection can also cause damage to the heart valves (rheumatic fever) and kidneys (nephritis). Streptococcal infections can also cause scarlet fever, tonsillitis, pneumonia, sinusitis and ear infections.

Because of these possible complications, a "strep throat" should be treated with an antibiotic. "Strep" infections usually cause a longer lasting sore throat than a "cold" or the "flu." But "strep" is not always easy to detect by examination, and a throat culture may be needed.

A newly developed "strep test" detects a streptococcal infection in about 15 minutes, instead of the 24 hours or more required for a culture to grow. These tests, when positive, influence the physician to prescribe antibiotics. However, strep tests and cultures might not detect a number of other bacteria that can also cause severe sore throats that deserve antibiotic treatment. For example, severe and chronic cases of tonsillitis or tonsillar abscess may be culture negative; similarly, negative cultures are seen with diphtheria, and infections from oral sexual contacts will escape detection with "strep" culture tests.

Tonsillitis is an infection of the lumpy tissues on each side of the throat toward the back of the tongue. In the first two to three years of childhood, these tissues "catch" infections, sampling the child's environment to help develop his immunities (antibodies). Healthy tonsils do not remain infected, however, and frequent

sore throats from tonsillitis suggest the infection is not fully eliminated between episodes. A recent study has shown that children who suffer from frequently recurrent episodes of tonsillitis (such as 3 to 4 episodes each year for several years) were healthier after their tonsils were surgically removed.

Infections in the nose and sinuses can also cause sore throats because mucus from the nose drains down into the throat and carries the infection with it.

The most dangerous throat infection is epiglottitis, caused by bacteria that infect a portion of the larynx (voice box) and cause swelling that closes the airway. This infection is an emergency condition that requires prompt medical attention. Suspect it when swallowing is extremely painful (causing drooling), when speech is muffled and when breathing becomes difficult. A "strep" culture may miss this infection and be negative.

Allergy: Hayfever and allergy sufferers can get an irritated throat during an allergy attack the same way they get a stuffy, itchy nose, sneezing and post-nasal drip. The same pollens and molds that irritate the nose when they are inhaled also may irritate the throat. People allergic to cat and dog danders can suffer an irritated throat when they are around such animals. A very common allergy is house dust, and it is a special problem in the winter when a heating system blows dust throughout the house.

Irritation: During the cold winter months, dry heat may create a recurring, mild sore throat with a parched feeling, especially in the mornings. This often responds to humidification of bedroom air and increased liquid intake. Patients with a chronic stuffy nose, causing mouth breathing, also suffer with a dry throat. They need examination and treatment of the nose.

An occasional cause of morning sore throat is regurgitation of stomach acids up into the back of the throat where they are extremely irritating. This can be avoided if you tilt your bedframe so that the head is elevated four to six inches higher than the foot. You should also avoid eating and drinking for one to two hours before retiring. You might find antacids helpful. If these fail, see your doctor.

Industrial pollutants and chemicals in the air can irritate the nose and throat, but by far the most common and pervasive air pollutant is tobacco smoke. It cannot be tolerated by many persons who are either allergic or overly sensitive to its contents. Other irritants include smokeless tobacco, alcoholic beverages, and spicy foods.

A person who strains his voice (yelling at a sports event, for example) gets a sore throat not only from muscle strain, but also from the rough treatment of his throat membranes. Well-trained, experienced public speakers and singers learn not to abuse their throats and voices in this way. They produce loud voices by taking deep breaths and using their chest and abdominal muscles more than their throat muscles.

Tumors: Tumors of the throat, tongue and larynx (voice box) are usually (but not always) associated with long time use of tobacco and alcohol. Sore throat and difficult swallowing - sometimes with pain radiating to the ear - may be symptoms of such a tumor. More often the sore throat is so mild or so chronic that it is hardly noticed. Other important symptoms include hoarseness, a lump in the neck, unexplained weight loss and/or spitting up blood in the saliva or phlegm.

The diagnosis will require examination by a physician with special training in diseases of the ears, nose, throat, head and neck. Special mirrors or telescopic instruments will be used to see the suspicious areas of the throat.

How Can I Treat My Own Sore Throat?

A mild sore throat associated with "cold" or "flu" symptoms can be made more comfortable with the following remedies:

- Increase your liquid intake. (Warm tea with honey is a favorite home remedy).
- Use a steamer or humidifier in your bedroom.
- Gargle with warm salt water several times daily: 1/2 tsp salt to 1/2 cup water.
- Take mild pain relievers such as acetaminophen (Tylenol, Datril, Tempra), ibuprofen (Advil), etc.
- Take non-prescription throat lozenges.

When Should I See A Doctor?

Whenever a sore throat is severe, persists longer than the usual five to seven day duration of a "cold" or "flu," and is not associated with an avoidable allergy or irritation, you should seek medical attention. The following signs and symptoms should alert you to see your physician:

- Severe and prolonged sore throat
- Difficulty breathing
- Difficulty swallowing
- Difficulty opening the mouth
- Joint pains
- Earache
- Rash
- Fever (Over 101 degrees)
- Blood in saliva or phleam
- Frequently recurring sore throat
- Lump in the neck
- Hoarseness lasting over 2 weeks

Antibiotics are drugs that kill or impair bacteria. Penicillin or erythromycin (well-known antibiotics) are prescribed when the physician suspects streptococcal or other bacterial infection that will respond to them. However, a number of bacterial throat infections do not respond to penicillin, but require other categories of antibiotics instead. Antibiotics do not cure viral infections, but viruses do lower the patient's resistance to bacterial infections. When such a combined infection occurs, antibiotics may become necessary.

When an antibiotic is prescribed, it should be taken as the physician directs for the full course (usually l0 days). Otherwise the infection will probably be suppressed rather than eliminated, and it can return.

What If My Throat Culture Is Negative?

A "strep" culture tests only for the presence of streptococcal infections. Many other infections, both bacterial and viral, will yield negative cultures and sometimes so does a streptococcal infection. Therefore, when your culture is negative, your physician will base his decision for treatment on the severity of your symptoms and the appearance of your throat on examination. Do not discontinue your medications unless your physician instructs you to do so.

Should Other Family Members Be Treated or Cultured?

When "strep" throat is proven by test or culture, many experts recommend treatment of other family members, because streptococcal infections are so highly contagious. Others recommend treating only the family members with sore throats and culturing the others. So be sure you tell your physician how other family members are feeling. Practice good sanitary habits; avoid close physical contact and sharing of napkins, towels and utensils with the infected person. Handwashing makes good sense.

The advice in this pamphlet is for general information. But remember, the best advice for your specific case is what you get from your physician, who hears your symptoms and examines your throat.

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