

Sore throat

L Lambert

Amayeza Information Services, South Africa

Corresponding author, email: amayeza@amayeza-info.co.za

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Sore throat or pharyngitis, is a painful inflammation of the back part of the throat (pharynx). Other areas such as the back of the tongue, palate (roof of the mouth) or the tonsils may also be affected. Sore throat is a common condition experienced by all ages, described as a dry, scratchy, painful throat, with symptoms often worsening with swallowing.

Causes of sore throat

Most sore throats are caused by viral (90%) or bacterial infections (10%).

Viral infections

Viruses are the main cause of throat infections, spread when droplets containing the virus are carried into the air as one coughs, sneezes or speaks. Breathing in these droplets causes one to become infected, leading to symptoms characteristic of that virus. Viruses are also spread through hand-to-hand contact. Hands get contaminated when a sick person touches their nose or mouth and then touches another person or an object or surface.

The most common viruses causing sore throat are those that cause upper respiratory infections, like the common cold. Patients who have a cold may often have a runny or congested nose, redness of the eyes, cough and fever along with a sore throat.

Other types of viral infections that cause a sore throat include:

- Laryngitis which is the inflammation of the larynx (voice box). Patients suffering from laryngitis complain of having a hoarse voice, dry cough and the need to clear their throat constantly.
- Glandular fever which causes the glands in the neck to become swollen. Patients feel tired, have fever and a severe sore throat.
- Tonsillitis which is the inflammation of the tonsils (lumps of tissue on either side of the throat) causing discomfort on swallowing. Patients may also have fever.

Bacterial infections

Bacteria belonging to the streptococcal group are often associated with a sore throat. "Strep throat" caused by *Streptococcus pyogenes* is the most common culprit and affects children to a greater extent than adults. Patients with "strep throat" have fever and swollen glands in the neck. Since it is a bacterial infection, antibiotics are needed for treatment.

Other causes

Although sore throat is mainly caused by viral or bacterial infections, allergies, dry air and irritants such as tobacco smoke are non-infectious causes of a dry, scratchy or irritated throat.

Treatment of sore throat

When a sore throat is caused by a bacterial infection, antibiotics are usually necessary for treatment. Sore throat caused by viral infection usually resolves within a week. During this time, a variety of preparations available over-the-counter (OTC) can help relieve and soothe sore throat.

Oral analgesic and anti-inflammatory preparations

Simple analgesics should be considered as first-line treatment. Paracetamol, aspirin or ibuprofen provide rapid and effective relief of sore throat.

Topical agents: throat sprays, rinses and lozenges

Topical analgesics, local anaesthetics, and anti-infectives (antiseptics) are available as oral rinses, sprays and lozenges which may soothe a sore throat. These are available as single ingredient formulations or in combination for multi-action purposes (as summarised in Table I).

Oral rinses containing a local anaesthetic or analgesic provide relief of sore throat as they coat the inside of the mouth and base of the tongue. Since most sore throats are

viral in nature, products that contain antiseptics may assist with these minor infections. Throat sprays are available containing similar ingredients used in mouthwashes and gargles to effectively coat the back of the throat. Lozenges help to relieve sore throat and soothe a dry throat and may be more effective than sprays or oral rinses as they last longer in the throat.

Table 1: Properties and active ingredients used in OTC topical agents

Properties of ingredients in topical agents	Active ingredient
Analgesic, anti-inflammatory and antipyretic	Benzylamine
Antiseptic	Cetylpyridium chloride, chlorhexidine gluconate, hexetidine, thymol
Local anaesthetic	Benzocaine
Antiseptic and deodorant	Hydrogen peroxide 1.5%
Antiseptic and local anaesthetic	Phenol
Antiseptic and anti-inflammatory	Povidone-iodine

Advice to patients: Home care tips for soothing a sore throat

Pharmacist's assistants are at the forefront of patient care and often sought out for advice. The following advice or remedies can help patients during a bout of sore throat:

- Rest, especially when a sore throat is accompanied by other symptoms.
- Keep hydrated since a sore throat may make it difficult for patients to swallow. As a result, many patients, especially children, may be reluctant to eat. Therefore, patients should be encouraged to drink plenty of cool or warm fluids. Sipping on warm beverages (e.g. honey or lemon tea), cold beverages or frozen desserts may provide relief.
- Avoid foods that may aggravate a sore throat. Children, in particular, should be fed soft, bland foods.
- Salt water is an age-old remedy and while its efficacy is not known, it is not harmful. A suitable solution is made by dissolving half a teaspoonful of salt in a glass of warm water and gargling as often as necessary.
- If the air (in the home) is too dry and affecting the throat, a humidifier may be used to help moisten the air thereby relieving the dry, scratchy feeling in the throat.

Important notes

Patient safety is of utmost importance, therefore:

- The manufacturers' recommendations regarding the use of an OTC product should be carefully read and observed.
- Cognisance should be taken as to the suitability of a product for children.
- Aspirin should be avoided in patients under the age of 16 years because of its association with Reye's syndrome.

- Lozenges, hard sweets or ice cubes should not be given to children younger than five years because of the risk of choking.
- Children younger than six years are not usually able to gargle properly, therefore gargles should not be advised for these children.
- Throat sprays are generally not recommended for children.
- The use of honey, while recommended for its soothing properties, should not be used in children under one year of age.

When to refer

While most sore throats are self-limiting and resolve within a week, it is important to know when to refer patients. Patients should see a doctor if:

- they experience difficulty in breathing,
- a skin rash is also present,
- there is swelling of the tongue or glands in the neck,
- they have a stiff neck or cannot open their mouth,
- there is no improvement in symptoms after a week,
- they have a persistent fever or cough.

Conclusion

Sore throat is most often a symptom of a viral or bacterial infection. OTC analgesics and anti-inflammatories are available as an effective way to manage pain. Additionally, topical sprays, rinses and lozenges and home remedies may also be helpful. In most cases, sore throat is uncomplicated and resolves within a week. However, medical help should be sought if there is no improvement after appropriate treatment.

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