



Managing symptoms of the common cold in adults

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Although most colds are mild and resolve on their own within a short period of time, many people suffering from the bothersome symptoms of a cold seek symptomatic treatment. This article discusses the common cold in adults and its management.

Causes of colds

The common cold may be caused by a large number of viruses. Over 200 types of viruses have been associated with the common cold. Rhinoviruses are responsible for causing most colds and there are more than 100 different strains of rhinoviruses. Other viruses that can cause the common cold include coronaviruses, respiratory syncytial virus (RSV) and adenovirus.

Even though the individual strains of viruses that cause the common cold produce immunity, a person may suffer from colds many times throughout their lifetime because of subsequent infection with other viral strains or other viruses that cause colds. It is estimated that the average adult experiences two to three colds a year, while otherwise healthy children may have eight to 12 colds a year.

Children are the most important reservoir of cold viruses, and they have an important role in the introduction and transmission of rhinovirus infections in the home. Families whose oldest children are between the ages of one and four years have the greatest risk of acquiring respiratory infections. The risk is also higher in families with children who attend school or are in day-care.

- Hand washing with plain soap and water is an essential and highly effective way to prevent the spread of most infections, including the common cold.
- Alcohol-based hand rubs are a good alternative for disinfecting hands if a sink is not available.
- Hands should be washed before preparing food and eating, after using the restroom and after coughing, blowing the nose or sneezing.
- Tissues should be used to cover the mouth when sneezing or coughing. Sneezing or coughing into the sleeve of one's clothing (at the inner elbow) when a tissue is not readily available does not contaminate the hands and is a good way to contain sprays of saliva and secretions.

Symptoms of the common cold

The common cold is not a specific disease but rather a group of illnesses with similar symptoms. The common cold usually causes nasal congestion, runny nose and sneezing. A sore throat may be present on the first day, but usually resolves quickly. If a cough occurs in a person with a cold, it develops on around the fourth or fifth day of symptoms and often when symptoms of nasal congestion and runny nose are resolving. Fever is uncommon in adults with a cold but may be present in children.

Nasal discharge is usually clear, but a purulent nasal discharge may occur in some patients with the common cold. Many patients place considerable importance on the colour of the nasal discharge and sputum and think that a thick purulent discharge indicates the need for an antibiotic. In fact, coloured nasal discharge is a normal, self-limited phase of the uncomplicated common cold. The presence of a purulent nasal discharge alone cannot distinguish between a cold and another respiratory tract infection (such as sinusitis) and should not be used as the deciding factor for antibiotic use.

Most colds are mild and self-limited, do not cause serious illness or complications and last for three to seven days, although many people have residual symptoms such as coughing, sneezing, nasal and chest congestion for up to two weeks. Symptoms of the common cold may last an additional three days on average in smokers.

Treatment

There is no cure for the common cold other than the passage of time during which the virus is cleared from the body by the person's immune system. Unfortunately, it is the response of the person's immune system that is responsible for most of the symptoms of the common cold. As a result, most of the remedies used to treat symptoms of the cold are aimed at attenuating the effects of the immune response.

Treatments for the common cold fall into two main categories:

- Symptom alleviators, which have no direct effects on the virus and do not shorten or cure the cold
- Other remedies for which there is no clear mechanism of action

Antibiotics are not useful for treating the common cold because antibiotics are only effective against infections caused by bacteria, not viruses. Unnecessary use of antibiotics for viral infections can lead to antibiotic resistance as well as side-effects such as diarrhoea and allergic reactions in some patients. There is also no evidence to suggest that antibiotics prevent secondary bacterial complications of viral upper respiratory tract infections, such as the common cold.

Alleviating symptoms of the common cold

Runny nose and nasal congestion

Antihistamines when used alone in patients with the common cold are of minimal benefit in relieving symptoms of runny nose and nasal congestion. The combination of an antihistamine and a decongestant, however, may be more effective than either agent alone. First-generation antihistamines such as triprolidine, diphenhydramine, chlorpheniramine, promethazine and brompheniramine may relieve runny nose and sneezing, but their use may be limited by side-effects such as sedation and drying of the eyes, nose and mouth. Second-generation antihistamines such as loratadine appear to reduce runny nose, sneezing and congestion without causing drowsiness.

Oral decongestants such as ephedrine, phenylephrine and pseudo-ephedrine in combination with an antihistamine appear to decrease runny nose, nasal discharge and nasal congestion. Side-effects may include dryness of the mouth and insomnia. Decongestants can increase blood pressure and patients with hypertension should check with the doctor or pharmacist first before taking an oral decongestant.

Topical decongestant nasal sprays and drops give temporary relief from nasal congestion but are for short-term use only (maximum duration of three days), as use for a longer time can worsen nasal congestion. Saline nasal sprays can also be helpful to relieve runny nose and nasal congestion and are suitable for long-term use as well as for use during pregnancy.

Headache and sore throat

Sore throat and headache are best treated with a mild pain reliever such as paracetamol or a nonsteroidal anti-inflammatory drug available over-the-counter, such as ibuprofen. Aspirin is suitable for use in adults but should be avoided in children under the age of 16 years.

Topical therapies such as throat lozenges, sprays and gargles that contain analgesics and local anaesthetics are useful in relieving throat pain. Benzydamine HCl, menthol and flurbiprofen have analgesic effects while benzocaine, lignocaine and benzyl alcohol have local anaesthetic effects.

Cough

Although little evidence has been obtained in clinical trials, the choice of treatment for an acute viral cough still depends on the type of cough.

- Productive coughs that bring up sputum or phlegm may be treated with an expectorant, such as guaiphenesin.
- Non-productive coughs that disturb sleep may be treated with an antitussive, such as dextromethorphan or pholcodine.

Other remedies

A number of alternative treatments, including vitamin C, zinc and herbal products such as *Echinacea* are often used to prevent and treat the common cold. While none of these treatments are likely to cause harm, none have convincingly been proven to be effective in suitably-sized, well-conducted clinical trials.

In conclusion, symptomatic therapy remains the mainstay of treatment for the common cold. In the absence of evidence of secondary bacterial infections, antibiotics should not be used in patients with the common cold. Also, coloured nasal secretions should not be considered as evidence of a secondary bacterial infection.

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