Cough syrups for a dry cough

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Cough is one of the most common conditions for which patients seek the advice of healthcare professionals. Most cases of acute cough (i.e. lasting three weeks or less) presenting in the pharmacy are symptoms of an upper respiratory tract infection associated with the common cold. Although an acute cough following an upper respiratory tract infection is usually self-limiting and subsides within one to two weeks with or without treatment, it can be bothersome for patients and their caregivers. As such, patients seeking advice on an acute cough do so because they want relief from symptoms, especially if the cough interferes with sleep and daytime functioning.

It should be established that the cough has been present for less than 3 weeks and followed an upper respiratory tract infection.

 Patients with a cough that has lasted 2 weeks or more and patients with another possible cause for the cough (i.e. not following a cold) should be referred to the doctor.

Types of cough

A cough is a protective reflex action that occurs when the airways are irritated or obstructed. The purpose of a cough is to clear the airways so that breathing can continue normally. Respiratory infections irritate the airways and are a common cause of cough. Allergies can also irritate the airways and can cause a cough. People who smoke often cough. Cough may also result from a postnasal drip, in which nasal secretions drain down the back of the nose into the throat and sometimes into the trachea (windpipe), where they cause irritation and cough.

Traditionally, coughs are described as either:

- Productive wet, chesty and producing mucus or
- Non-productive dry, tickly or tight, with no mucus being brought up

A productive cough serves a purpose as it helps to get rid of mucus secretions clogging the airways. On the other hand, a dry cough serves no useful purpose as no mucus is produced. This type of cough can be painful and irritating and may respond to treatment with a cough suppressant.

Antitussive therapy/cough suppressants

Antitussive therapy with an over-the-counter cough suppressant may be recommended for a few nights for an acute, dry cough if the cough is the lingering symptom following a cold and is disturbing sleep.

There are three main categories of cough suppressants; demulcents, centrally-acting opioid-like cough suppressants and antihistamines.

Demulcents

 Demulcents include home remedies such as glycerol, honey and lemon drinks and simple linctuses e.g. Simple Linctus BP. Demulcents soothe and coat the throat, have a pleasant taste and may help to reduce cough frequency. These products are particularly suitable for children and pregnant women because they do not contain active ingredients or medicines.

Opioid-like cough suppressants

 Opioid-like cough suppressants suppress the urge to cough primarily by their effect on the cough centre in the brain. Examples include codeine, pholcodine, and dextromethorphan. Of the commonly used cough suppressants, dextromethorphan and pholcodine are considered to have fewer side effects than codeine.

Sedating antihistamines

 Sedating antihistamines such as diphenhydramine, promethazine and phenyltoloxamine are often used as cough suppressants in combination cough preparations. Their sedative effects are a disadvantage for daytime use but may be a short-term advantage for night coughs. The combination of an opioid-like cough suppressant and a sedating antihistamine may be used to good effect for a dry cough. Many combination cough mixtures, however, contain ingredients with apparently opposite effects e.g. a cough suppressant to stop coughing together with an expectorant which promotes coughing.

A word on cough mixtures in children:

- While it is uncertain whether over-the-counter cough medicines are effective in adults, there is no information showing a benefit of cough mixtures over placebo in children.
- Furthermore, the safety of cough and cold medicines in children is of great concern.
- The Food and Drug Administration (FDA) in the USA advises against using over-the-counter cough and cold preparations in children under 2 years of age.
- In South Africa, the Medicines Control Council has advised that promethazine-containing medicines are contraindicated for use in children under 2 years of age.

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