AI-00468 DDx Cough



What is cough? What is the pathophysiology of a cough? Perform a DDx on cough? When do I consider cough life threatening? When does antibiotic needed? What are the reasons in 2023 why cough is difficult to get rid of using OTC meds? List 10 remedies for cough without going to the hospital. How is cough treated in hospital setting when it becomes severe and complicates to pneumonia?

What is cough?

Cough is a reflex action that helps to clear mucus and irritants from the airways. It is a common symptom of many respiratory conditions, including the common cold, the flu, bronchitis, and pneumonia.

What is the pathophysiology of a cough?

The cough reflex is triggered when sensory receptors in the airways are irritated. These receptors can be irritated by mucus, dust, smoke, or other irritants. The cough reflex is mediated by the vagus nerve, which sends signals to the brain to initiate the cough.

The cough reflex is a complex process that involves many different muscles and organs. The diaphragm and abdominal muscles contract to create a sudden increase in pressure in the chest. This increase in pressure forces air out of the lungs, which helps to clear mucus and irritants.

DDx on cough

The differential diagnosis of cough is broad and includes a wide range of infectious and non-infectious conditions. Some of the most common causes of cough include:

- Viral infections, such as the common cold and the flu
- Bacterial infections, such as bronchitis and pneumonia

- Allergic rhinitis (hay fever)
- Asthma
- Chronic obstructive pulmonary disease (COPD)
- Gastroesophageal reflux disease (GERD)
- Postnasal drip
- Lung cancer

When do I consider cough life threatening?

A cough can be life-threatening if it is accompanied by any of the following symptoms:

- Difficulty breathing
- Wheezing
- · Chest pain
- Coughing up blood
- Cyanosis (a bluish tint to the skin and lips)
- Fever over 101 degrees Fahrenheit
- Rapid respiratory rate
- Lethargy

If you experience any of these symptoms, it is important to seek medical attention immediately.

When does antibiotic needed?

Antibiotics are only needed to treat cough caused by bacterial infections. Viral infections, such as the common cold and the flu, cannot be treated with antibiotics.

If you have a cough that is accompanied by fever, thick green or yellow mucus, or chest pain, you should see a doctor to determine if you need antibiotics.

Reasons why cough is difficult to get rid of using OTC meds in 2023

There are a few reasons why cough may be difficult to get rid of using over-the-counter (OTC) medications:

- The cough may be caused by a bacterial infection, which can only be treated with antibiotics.
- The cough may be caused by an underlying medical condition, such as asthma or COPD.
- The cough may be caused by an irritant, such as smoke or dust.
- The OTC medication may not be effective for the type of cough you have.

If you have a cough that does not improve with OTC medications, or if you have a cough that is accompanied by other symptoms, such as fever or difficulty breathing, you should see a doctor.

10 remedies for cough without going to the hospital

Here are 10 remedies for cough without going to the hospital:

- 1. Drink plenty of fluids, such as water, juice, or clear broth. This will help to thin mucus and make it easier to cough up.
- 2. Gargle with warm salt water. This can help to soothe a sore throat.
- 3. Suck on lozenges or hard candy. This can also help to soothe a sore throat.
- 4. Use a humidifier or take a hot shower. The steam can help to loosen mucus and make it easier to cough up.
- 5. Elevate your head when you sleep. This can help to reduce coughing at night.
- 6. Get plenty of rest. Your body needs time to heal.
- 7. Avoid smoking and secondhand smoke. Smoke can irritate the airways and make a cough worse.
- 8. Avoid alcohol and caffeine. These substances can also irritate the airways.
- Take over-the-counter cough medications. There are a variety of OTC cough medications available, such as expectorants, cough suppressants, and throat lozenges. Be sure to follow the directions on the label carefully.
- 10. Use honey. Honey has been shown to be effective in relieving cough symptoms. You can take a teaspoon of honey on its own or add it to tea or warm water.

How is cough treated in hospital setting when it becomes severe and complicates to pneumonia?

If a cough becomes severe and complicates to pneumonia, the patient will likely be admitted to the hospital. In the hospital, the patient may be given oxygen therapy, antibiotics, and intravenous fluids.

The patient may also be given chest physiotherapy (CPT) to help loosen mucus and make it easier to cough up. CPT involves tapping on the patient's chest and back, as well as using a postural drainage device.

In some cases, the patient may need to be intubated and placed on a ventilator.