What Is Cough-Variant Asthma?

If you have a chronic cough — a cough that lasts longer than six to eight weeks — with no other associated symptoms, it may be cough-variant asthma.

Cough-variant asthma has one cardinal symptom — a chronic cough. The cough is non-productive and dry and is not associated with other “typical” asthma symptoms, such as shortness of breath and wheezing.

This cough occurs at any time, day or night. It may worsen at night and also during exercise. It may also worsen when exposed to allergen and cold air.

Cough-variant asthma is most common in children, although it can occur in people of all ages. It often leads to “classic” asthma.

There is no known cause for cough-variant asthma, however many people notice it begins after exposure to an allergen or after an acute upper respiratory infection. Occasionally it occurs as a side effect of beta-blockers, a medication that is used to treat hypertension, heart disease, heart arrhythmias and migraines.

How Is Cough-Variant Asthma Diagnosed?

Cough-variant asthma may be tricky to diagnose, as the only symptom is a chronic cough. Diagnosis is typically made after a thorough medical examination is completed, ruling out other causes of the cough using chest X-rays, lab work, and spirometry. In fact, spirometry is often normal in people with cough-variant asthma, when it is decreased in people with classic asthma.

A simple way to diagnose cough-variant asthma is with the use of asthma medications. If the cough improves with asthma medications, it is safe to assume an asthma diagnosis.

A practitioner may also order a methacholine challenge test. Methacholine causes constriction off the airways when inhaled into the lungs. For people with asthma, the constriction occurs at a low dose. For an asthma diagnosis to be made based on the methacholine challenge test, lung function decreases by 20 percent during the test.

Treatment of Cough-Variant Asthma

Typically, cough-variant asthma is treated in the same fashion as classic asthma. Inhalers are prescribed — a combination of albuterol and ipratropium (rescue inhaler) and inhaled steroids is typically used.

The cough associated with cough-variant asthma is not responsive to cough suppressant medications.
However, there are also other ways to manage cough-variant asthma. Please keep in mind that these should be used in conjunction with any medication therapy prescribed by your doctor:

- **Quit smoking.** 400,000 people die in the U.S. yearly as a result of cigarettes, with 100,000 of those cases being related to lung function disorders. It is common knowledge that smoking worsens many health conditions and also increases cancer risk; worsening cough-variant asthma is not exempt. Quitting smoking is no easy feat but it will improve health in general.

- **Avoid environmental allergens.** Environmental allergens, called aeroallergens, include pollens, biogenic waste, mold spores and occupational allergens. For people whose cough-variant asthma worsens as a result of environmental allergens, avoiding these allergens is key. It may be difficult to avoid allergens all of the time, but avoiding them as much as possible can greatly decrease asthmatic symptoms.

**Alternative Treatment Options**

It is estimated that 58 percent of people use alternative and complementary treatments in conjunction with standard medical treatments. In fact, $17 billion is spent annually in the U.S. on the use of complementary medicine.

- **Breathing exercises:** the use of breathing exercises for asthma (such as the Buteyko method and yogic breathing, pranayama) does not help with the underlying cause of asthma, but may help to control symptoms associated with asthma.

- **Acupuncture:** this uses tiny needles inserted into the skin at specific points in the body. Research still needs to be done to determine the effectiveness of acupuncture for asthma, but there are reports of acupuncture helping the symptoms of asthma.

- **Consumption of antioxidants.** Studies show that people with asthma are often antioxidant-deficient, often in the nutrients found in fruits and vegetables. An increase in magnesium, vitamin C and vitamin E may promote a decrease in asthma symptoms; however, more research needs to be done.

- **Omega-3 fatty acids.** Omega-3 fatty acids are known to decrease inflammation in the body; they may also decrease lung inflammation associated with asthma. Although we don’t know the most beneficial type of omega-3 fatty acids for reduction of asthma symptoms (fish, flaxseed, canola oil), increasing the consumption in general may help.

- **Massage and relaxation.** Massage for asthma and relaxation techniques are known to promote a sense of wellbeing and decrease stress. We do not know if they will actually decrease asthma symptoms at this time.

Keep in mind that if you have received a diagnosis of cough-variant asthma, any medication your doctor has prescribed is for your benefit. Using other treatment modalities should be used in conjunction with prescribed medications, unless otherwise recommended by your physician. Discuss any alternative treatments with your physician as well.