

Asthma



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Asthma

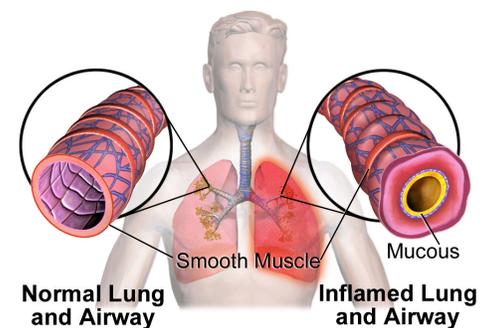
Asthma is a lifelong disease marked by spasms and narrowing (inflammation) of the airways. This causes difficulty in breathing which results in asthma symptoms that include, coughing, wheezing, shortness of breath and/or chest tightness. The onsets of asthma attacks are sudden and are due to triggers specific to each individual. According to the CDC, 1 in 12 people have asthma and the numbers increase each year. This equates to about 25 million people in the United States. While the reason for the increase in asthma rates is unknown, most people with asthma can control their symptoms and prevent attacks. This disease

results in nearly 2 million emergency room visits per year. Keeping asthma under control is vital in living a healthy and productive lifestyle.

The three major features of asthma are airway obstruction, inflammation and airway irritability. Airway obstruction is when the bands of muscles in the airways tighten, making it difficult for air to move freely through. Inflammation is when the bronchial tubes are red and swollen. When someone's airways "overreact" to a trigger, such as pollen, the airway then narrows, this is called airway irritability.

People who have a family history of the disease have an increased risk

in developing asthma themselves. However, asthma can develop anytime, even as an adult. If you find yourself having asthma symptoms, talk to your doctor who will help you manage your symptoms and help to prevent asthma attacks.



Asthma Causes and Triggers

No one really knows what causes an individual to have asthma but what is known is that asthma is a chronic inflammatory disease. One consistency in those who have asthma is when an individual's airways come in contact with an "asthma trigger," the airways become inflamed, narrow and fill with mucus. Causes and triggers of asthma vary by individual. People with asthma have very sensitive airways which causes them to react to many different environmental factors. The following are common triggers of asthma:

- Infections, colds, flu
- Allergens such as pollen, mold, pet dander and/or dust mites. (Allergies and asthma often occur together.)
- Strong odors from perfumes or cleaning products
- Air pollution
- Tobacco Smoke
- Exercise
- Weather
- Medications
- Strong emotions such as anxiety, laughter, crying and/or stress

An Asthma attack occurs when there is a sudden worsening of asthma

symptoms. This results in your airways suffering inflammation, swelling, and an excessive amount of mucus that makes breathing more difficult. Some common symptoms of an asthma attack are as follows:

- Coughing
- Wheezing
- Shortness of breath
- Chest tightness, pain or pressure

Not every individual that experiences an asthma attack will have the same symptoms or have all the symptoms at once. Symptoms, such as decreased activity or lethargy, maybe more subtle.

Diagnosing Asthma

First and foremost, your doctor plays a significant role in diagnosing, and helping control your asthma. Your doctor will first obtain a detailed medical history which will include all information on how you feel along with known asthma and allergy triggers. Be sure to tell your doctor all of the symptoms you are having, including when and where you find them most severe, as well as the different types of triggers you believe contribute to your symptoms. After your initial consultation is complete, you will then undergo a physical exam, laboratory test and some form of asthma testing. The types of asthma testing you may encounter are as follows:

- Spirometry is a lung function test that measures how much air you can exhale. This test will determine if there is airway obstruction.
- Peak Flow Testing is a self assesment that can be done at home which evaluates lung

function. You will use a peak flow meter to help measure airway function by taking deep breaths and blowing as hard as you can.

- Chest X-Rays are not routinely required unless there are symptoms of another condition such as pneumonia. A Chest X-Ray may also be done if your asthma treatment is not working as it should.

Peak Flow Meter



Treatment

Treatment of asthma can differ between individuals as there are many medications that are available that target different pathways. The severity of your asthma as well as what triggers your attacks will determine which types of treatments your doctors will prescribe. Agents to reverse bronchoconstriction, inhaled steroids, or a combination of both are very common treatments for people with asthma. These medications help to prevent asthma attacks by reducing the swelling and mucus production within the airways. Bronchodilator inhalers, known as rescue inhalers, are used to quickly relieve an asthma attack or even before one exercises to help prevent an exercise-induced asthma attack. Certain asthma patients may have an allergy component to their asthma, which may require a different approach to treatment. In some cases, your physician may even prescribe nebulizer treatments. With a nebulizer, the liquid medication is converted to a fine mist which is inhaled via a mask. Nebulizers are often helpful for people who suffer severe asthma attacks or for those who have a hard time using an inhaler, such as children.