



Allergy, Asthma & Sinus Center

Edwin P. Schulhafer, MD

Asthma

Regarding our approach to Asthma are certain assumptions:

- When asthma is well treated, most asthmatics would never need to seek emergency care for their conditions and they would never be hospitalized for this condition.
- Most asthmatics should be able to participate in sports including running.
- It is necessary to do more than just control asthma symptoms. It is necessary to maximize pulmonary function with the right combination of medication and exercise.
- Asthma needs to be followed by a specialist who uses pulmonary function tests on at least a yearly basis. Studies show patients who have asthma and who are followed by a specialist have far fewer trips to the emergency room, fewer hospitalizations and enjoy a higher quality of life than those whose asthma is cared for exclusively by a primary care doctor.

What is Asthma? Asthma is a disease in which airflow in and out of the lungs may be blocked by muscle squeezing, swelling and excess mucus. Patients with asthma may respond to factors in the environment (called triggers) which do not bother non-asthmatics. In response to a trigger an asthmatic's airways become narrowed and inflamed resulting in asthma symptoms.

How Do You Know if You Have Asthma? Asthma symptoms include shortness of breath, chest tightness, coughing and sometimes wheezing. It can start at any age but most commonly starts during childhood or young adulthood.

Asthma in Children

Approximately 10% of children have symptoms consistent with asthma. However, childhood asthma differs from asthma in adults in that infants and small children may not show the usual signs of asthma. Instead, asthma in children may appear as rapid respiration, noisy breathing, retraction and chest congestion. Parents may notice their child has less stamina during active playtime than his or her peers, or the child may try to limit physical activities to prevent coughing or wheezing. Recurrent or constant coughing spells may be the only common observable symptom in young children.

How is Asthma Diagnosed? Asthma is diagnosed by performing a pulmonary function test. You breathe at a quick rate into a mouthpiece hooked up to a pulmonary function machine. The machine measures maximum lung function. Next, you are given an asthma inhaler to use. In twenty minutes after you inhale this medicine, the lung function is measured again to see if it improves. Asthma is diagnosed based on what the measure of lung function shows.



Allergy, Asthma & Sinus Center

Edwin P. Schulhafer, MD

What Causes Asthma? Asthma runs in families because it has a genetic component. Sometimes it starts after a severe respiratory infection or pneumonia.

What are Triggers of Asthma? Triggers are things that make the asthma active. The common triggers are allergies such as pollen, dust mite, and animal dander. Cold air and exercise can provoke an asthma attack. Colds, respiratory infections and sinus infections can all provoke attacks.

Are There Different Degrees of Asthma? Yes. Asthma can be continual or occurring only at different times it can be mild, moderate or severe. Pulmonary function testing helps determine how serious the asthma is.

What are the More Common Rescue Inhalers Used for Immediate Relief?

These medications are Beta-Agonists such as:

Proventil

Ventolin

ProAir

Xopenex

What is the Difference Between Daily Maintenance Medications and the More Common Rescue Inhalers? Rescue inhalers open up the airways and provide relief in 5 to 10 minutes. Their benefit lasts only 4 to 6 hours. They do not help reverse the underlying abnormality of tissue swelling and increased mucous. They do not make lasting improvement of lung function the way maintenance medications do.

Can Asthma Cause Permanent Lung Damage? Yes. Untreated and poorly treated asthma can result in scarring of the lungs. This is called "Airway Remodeling". Once it occurs, the maintenance medications for asthma cannot restore lung function to normal.

Well treated asthma should result for most people in:

- No emergency room visits or hospitalizations for asthma
- No work or school days lost due to asthma
- No awakening with night time cough or shortness of breath
- Little decreased productivity at school or work due to asthma
- Need for rescue inhaler is less than once weekly

There are people whose asthma is maximally treated and who continue to have significant symptoms. Most of these people have long-standing asthma that was not treated from the beginning with maintenance medications.