



## Asthma

**ASTHMA** may cause wheezing, congestion, cough or chest tightness. Each patient's asthma differs in how severe symptoms are and in what sets it off. Symptoms may be triggered by allergies, exercise, colds, sinus infections, fumes, and medicines' (such as aspirin) or by stomach acid reflux.

Your doctor will work with you to **MAKE SURE YOUR ASTHMA DOES NOT INTERFERE WITH YOUR LIFE**. With proper treatment, most patients with asthma can expect to achieve: a full night's sleep with no awakenings due to coughing; the ability to go to work or school with little if any absenteeism; full physical activity; no emergency room visits or hospitalization; and no significant side effects of medications. Because asthma is now understood to be an inflammatory disease and not simply abnormal airway constriction, treatment is aimed at reducing the **INFLAMMATION**.

### **LONG-TERM CONTROL**

General: Patients do best who take the time to be educated about their asthma. Learn the names of your medications. **LEARN HOW TO MONITOR YOUR SYMPTOMS** and what to do if symptoms are worse. For asthma patient with allergies, learn about avoidance measures for allergens such as dust mites or animals. Allergy injections may also improve and prevent symptoms. Yearly influenza injections ("flu shots") in October or November are important.

### **LEARN HOW TO INHALE YOUR MEDICATIONS CORRECTLY**

Most pressurized aerosols (MDIs) work best if used with a **SPACER**. Be sure to shake the canister, breathe out normally, squeeze the canister and breathe in slowly over five seconds then hold your breath for ten seconds. Dry powder inhalers may be inhaled quickly then hold your breath for ten seconds.

### **MEDICATIONS FOR LONG-TERM CONTROL**

- *Inhaled Corticosteroids* (Azmacort, Flovent, AeroBid, Pulmicort, QVAR)  
The risks of uncontrolled asthma should be weighed against the limited risks of these medications. Significant side effects usually only occur with very high doses. They are effective in **PREVENTION** of symptoms when used regularly. They reduce the need for oral corticosteroids (prednisone). **Be sure to rinse your mouth with water after each use.**
- *Inhaled Long Acting Beta 2 Agonists* (Foradil, Serevent) may be used regularly up to every 12 hours for control of exercise asthma or nighttime asthma. Regular use may allow reduction in the dose of inhaled corticosteroids. They sometimes increase the heart rate or cause difficulty sleeping.
- *Advair* is a combination of Flovent and Serevent.
- *Leukotriene modifiers* (Singulair, Accolate, Zyflo) are tablets that help with both long term control and prevention of symptoms.
- *Intal, Tilade, and Theophylline* are other medications that are sometimes used for asthma.

### **QUICK-RELIEF MEDICATIONS**

Short acting inhaled beta 2 agonists (albuterol, Proventil, Ventolin, Maxair) provide fast relief of symptoms. They may be used before exercise to prevent symptoms. They may cause increased heart rate, especially in older patients or those with heart problems. They will not improve your asthma and overuse **MAY MAKE YOUR ASTHMA WORSE**.

- *Atrovent (ipratropium bromide)* has a slower onset of action (30 min) but does not cause an increase in heart rate. It may be helpful in relieving coughing from fxrespiratory infections.
- *Combivent* is a combination of albuterol and ipratropium bromide.