Asthma Relief and Prevention

Asthma is a chronic lung condition characterized by breathing difficulties. People with asthma have hyper-responsive, extra sensitive airways. During the course of an asthma attack, irritated airways react by narrowing and constricting. This causes increased resistance to airflow and obstructs the flow of air through the bronchial passages to and from the lungs.

There are two main types of asthma treatment medicines:

* Long-Term Control Medicines: also called preventers, are taken daily, usually over long periods of time, to control chronic symptoms and to prevent asthma episodes or attacks. The effects of these medicines are generally felt after taking them for a few weeks. Long-term control medicines are necessary for people with persistent asthma.
* Quick Relief Medicines: also called relievers, give rapid, short-term treatment and are taken when you have worsening asthma symptoms that can lead to asthma episodes or attacks. These medications are effective within minutes.

Drugs, such as those resembling two of our hormones, can help alleviate asthma symptoms. These two hormones are adrenaline, called epinephrine in the United States, and the steroid hydrocortisone. There are also other medications that help treat asthma. Though drugs can remove all of the symptoms for a mild asthma sufferer, more severe or long-standing cases of asthma generally do not get such good results.

Adrenaline, also called epinephrine, is pumped into our bloodstream in cases of sudden fright or in an emergency. It is the quick-acting hormone created by the adrenal glands located near our kidneys. It causes a racing pulse, a thumping heart, and readies your body for emergency action. In asthma, these adrenaline-type medicines quickly alleviate symptoms of asthma for a short time, and are called relievers.

Hydrocortisone is manufactured by the outer part of our adrenal glands, called the 'cortex'. It is also partly an “emergency hormone” but it works much more slowly, in a completely different way to adrenaline, and lasts for a longer duration. Medicines which resembling hydrocortisone gradually allow the lining of air tubes in an asthma sufferer to resemble regular, healthy airways. This results in asthma that is less severe and a lesser likelihood of asthma attacks. Therefore, these steroids medications are called preventers. There are additional asthma 'preventers', but the steroids are the most effective. Most asthma sufferers should take both preventers as well as relievers.

Usually the most effective way to administer these medicines is to inhale them. That is, you breath them in, through your nose or mouth.
The reasons you inhale them are :
* the medicine works more rapidly,
* because you need a smaller dose of the medicine, and
* you won't suffer the same number of side effects.

The speed with which the medicine is effective is particularly important with the adrenaline-like, fast-acting relievers. Quick relief medicines are used only acutely, at the time of an attack or impending attack. One kind of quick relief medicine is a short-acting inhaled bronchodilator. Bronchodilators take effect by relaxing the muscles that have constricted around the airways. They help rapidly open up airways and make breathing easier. Occasionally, they are called "rescue" or "relief" medicines because they can cease an asthma attack very rapidly. These medicines act fast but their effects only last for a short duration of time. It is recommended that one take quick relief medicines when one initially begins to feel asthma symptoms such as wheezing, coughing, chest tightness, or shortness of breath. Asthma sufferers should always be in possession of one of these inhalers in case of an attack. In the case of severe attacks, your physician may administer steroids to treat the inflammation.

Long-term control medications include :

* Long-acting beta-agonists are one kind of long-term control medication. They are bronchodilators, not anti-inflammatory drugs. These medicines are used to aid in controlling moderate to severe asthma as well as in preventing night-time symptoms. Long-acting beta-agonists are taken in conjunction with an inhaled corticosteroid medicine.
* Cromolyn and nedocromil are two long-term control medicines utilized in the treatment of mild persistent asthma.
* Leukotriene modifiers (such as zafirlukast, montelukast, and zileuton) are long-term control medicines administered either alone to treat mild persistent asthma or in conjunction with inhaled corticosteroids to treat moderate persistent asthma or severe persistent asthma.
* The most effective, long-term control medication for asthma is an inhaled corticosteroid. The reason for this is that this medicine reduces the swelling of airways that increases the chances of asthma attacks. Inhaled corticosteroids (or steroids for short) are the preferred treatment for controlling mild, moderate, and severe persistent asthma. They are safe when taken as directed by your doctor. Inhaled medicines go directly to the affected lungs.

There are many types of inhalers that are used by different methods. Therefore, it is important to know how to correctly use your inhaler. In some cases, steroid tablets or liquid are used on a short-term basis to rein in asthma symptoms. The liquid or tablet varieties may also be utilized in the treatment of severe asthma.

* Theophylline is a long-term control medication used either alone to treat mild persistent asthma or in conjunction with inhaled corticosteroids to treat moderate persistent asthma. People who take theophylline should have their blood tested regularly checked to ensure proper dosage.

If you cease taking long-term control medicines, your asthma will likely recur. Optimally, one should use the least amount of medicine required to manage asthma symptoms.