

Asthma Awareness: Exercise Induced Asthma

Summer is over and many adults and children are planning fall and winter sports or other exercise-related activities. We don't often stop and think about asthma and exercise. And yet, asthma in general, whether exercise induced or chronic, is one the most common chronic diseases worldwide which patients, parents and health care providers need to think about and understand. Consider the statistics: In the United States alone, there are 10 million asthmatics, with up to 30% being children; Asthma attacks will cause significant absences from school and work, generating at least 6.5 million outpatient visits and 450,000 hospital admissions, at a staggering cost of 4 billion dollars; Despite growing awareness, better understanding of the physiology and excellent medication, the prevalence and death rate from asthma in the 1990s is increasing.

How does exercise cause asthma? Remember that asthma is a genetic disease which at times may be well controlled, while at other times, may be associated with chest tightness, shortness of breath or wheezing. A child may, for example, be perfectly healthy and then start coughing and wheezing during and after exercising or playing sports. In this case, the rapid breathing of cold, dry air causes airways to narrow and become obstructed, triggering coughing and wheezing.

Without question, our awareness of asthma has increased, and is due to better patient and parent education. A special NIH panel has determined that asthma should be classified as being mild, moderate or severe, and the inflammation associated with asthma should be treated with inhaled steroids, or the newer leukotrienes antagonists (see Asthma articles #1,2,3), depending on the kind and frequency of daytime symptoms, nighttime sleeping problems and peak flow values. The mild category is interesting and further divided into two types: mild intermittent and mild persistent. Mild persistent asthma should be treated with inhalers regularly. Patients who wheeze or get short of breath occasionally, as may occur with exercise, are considered to have mild intermittent asthma and are treated as needed. More recently, however, a lot of debate and research has suggested that regular treatment may help prevent intermittent asthma from worsening and becoming persistent. The decision to treat regularly will depend on each individual patient, whether child or adult.

For exercise induced mild asthma, warm up in an indoor setting before starting the outdoor activities. Use a short acting bronchodilator 5-60 minutes before exercise is usually sufficient to relax the airways and prevent any symptoms from occurring. The most commonly prescribed short acting bronchodilator is Proventil HFA. Proventil HFA and similar bronchodilators are commonly recommended for any acute exacerbation of asthma. In certain cases, however, a reaction may occur several hours after the exercise, with the airways becoming inflamed and causing wheezing, breathlessness, chest tightness, and cough. For these patients, steroids may very well be needed.

What if a patient plays several sports and needs a bronchodilator more than once a day for prevention? One can use a longer acting (i.e., up to 12 hour) bronchodilator such as inhaled Foradil, to prevent and treat symptoms all day long and even leukotriene

antagonists, may have benefit in preventing exercise induced asthma.

Heighten your awareness ,therefore, and consider having an evaluation for asthma if you or your child has had: an attack or recurrent attacks of wheezing; coughing or chest tightness after viral infections, exposure to airborne allergens, pollutants (i.e., smoke, ozone), cold air, sports or exercise. Viral infections that "go to the chest" and take more than 10 days to clear, and in which over-the-counter medication have failed should be evaluated immediately.