

Exercise Induced Bronchospasm

By Dr. Mark Schecker

Has the following ever happened to you?

Suddenly within minutes after starting to exercise you begin to feel chest tightness, wheezing, and shortness of breath. Does your child start to cough while running, jumping, or playing? If so, you or your child may be suffering from **Exercise Induced Bronchospasm** (aka, E.I.B.) and you would not be alone because a number of elite and professional athletes like Jackie Joyner-Kersey and Amy Van Dyken are noted to suffer from Exercise Induced Bronchospasm too.

E.I.B. is narrowing or spasm of the bronchial tubes in the lungs caused by exercise exertion. Symptoms occur either during or occasionally shortly after exercise is completed. The exact mechanism is unknown but the constriction of the airways is thought to occur as a result of the breathing passages drying out. Because of this, exercising in cold dry air seems to trigger symptoms more frequently than doing activity in warm moist environments. Some individuals have their E.I.B. in addition to a more extensive Asthma condition caused by a variety of triggers; while in other individuals their bronchospasm symptoms are solely triggered by exercise. The biggest problem with Exercise Induced Bronchospasm is that it usually severely limits the ability to participate in sports and other physically demanding activities like dancing, for example.

Diagnosing E.I.B. requires careful history and physical exam by a physician knowledgeable in this area. Sometimes an exercise challenge test is done. This consists of doing exercise either in a laboratory on a bicycle or treadmill, or outdoors near the doctor's office. Usually an activity similar to the one stimulating the patient's symptoms is chosen. Immediately after the activity is completed breathing tests called **spirometry** are done with the use of a computer to determine whether or not evidence of E.I.B. is present.

Fortunately, E.I.B. is a very treatable condition and individuals who suffer from this malady should be able to participate in any physical activity, sport, or exercise they prefer. Obviously some very talented athletes have been able to accomplish the ultimate success, including Olympic gold medals, despite suffering from this problem. As with all types of bronchospasm, individual treatment plans are devised according to a particular person's needs. This can be done by any physician who is fairly well versed in respiratory diseases, but is usually accomplished by either a pulmonologist or an allergist. Treatment plans may include a variety of modalities, including "warm-up" exercises alone or in combination with the use of medications designed to block symptoms from occurring in the first place. These medications called "**beta-agonists**" are preferably used in an inhaled form. Again, however, the exact types of medications used need to be individualized to a

particular patient's profile. In certain situations new sports that are less likely to provoke symptoms, like swimming, may be suggested to replace other activities that more commonly trigger Exercise Induced Bronchospasm problems. Unfortunately, there is no perfect exercise for people with this condition. However, when treated appropriately, Exercise Induced Bronchospasm should not be a disruption to anyone.