

Is Asthma Caused by Exercise?

by Marek M. Pienkowski, M.D., Ph.D.

With spring in the air, school children start outdoor sports activities like soccer, baseball, football, cross country, etc. Some of them will develop, with exercise, wheezing, coughing, chest tightness or shortness of breath. Are they unfit? Too heavy? Lazy? Or do they have asthma?

Asthma is a very real and complex syndrome with a variety of triggers, which may cause these symptoms. The symptoms may occur during “cool-down” periods after strenuous exercise or with exposure to dry air, low temperature, air pollutants, high pollen or other air irritants. In many cases, a compounding of these different elements can precipitate a more severe asthma.

Symptoms are likely to be more pronounced after upper respiratory infections like the common cold or bronchitis. If your child has a predisposition to a runny nose or recurrent ear infections, these are likely factors that can also contribute to asthma. Symptoms of stomach upset, vomiting and reflux may also contribute to your child's asthmatic syndrome. Some other symptoms may be mild, such as a cough. However, a common symptom that isn't usually associated with asthma is fatigue.

If these symptoms are affecting your children's performance, it is time to make an appointment with an allergy and asthma physician for specific diagnosis and treatment. This condition, for the majority of children, will get progressively worse if left untreated. Prompt diagnosis and treatment is necessary for the best outcome.

Your doctor will perform a diagnostic evaluation based upon medical history (when and how the asthmatic symptoms occur), clinical examination and a special lung test called a spirometry. The testing may include a breathing test before and after exercise (so-called “challenge test”), rapid breathing dry air test (with CO₂) or tests after inhalation of different substances like methacholine or mannitol.

In addition, your child may benefit from an allergy evaluation, as allergies are a very common trigger of asthma for East Tennesseans. Other tests may include cardiovascular or gastrointestinal evaluations.

Once a diagnosis of asthma is made, treatment is very effective and may lead to remission of the syndrome. Treatment may require some adjustments of lifestyles.

If your child's condition is specifically exercise-induced bronchospasm (EIB) asthma, you will be advised of proper conditioning, such as warm-ups and cool-downs, limiting exercise in cold or dry air, use of a prophylactic inhaler, such as albuterol or oral medication like montelukast (Singulair). These medications are typically much more effective if used prior to exercise to prevent symptoms, rather than waiting for the symptoms to occur first.

However, if your child also has allergies, there is specific testing and treatment available, which may include allergy immunotherapy to selective




allergens. This type of treatment is typically very effective in inducing remission of asthmatic syndrome. If the child has food allergies or substantial reflux, proper food avoidance and anti-reflux measures would typically aid in reducing coughing.

If allergies are a component of your child's asthma, for example cat allergies, exposure to cats may initially cause only mild symptoms. However, typically four to six hours later, your child may suffer from more pronounced asthma symptoms, such as coughing, wheezing and severe shortness of breath, necessitating an emergency room visit.

Unfortunately, delayed reactions like this do not respond readily to inhalers and sometimes require treatment with steroids. The only effective prophylactic measure in resolving delayed allergic asthmatic reactions is allergy immunotherapy.

With proper management, the overall prognosis is good. Effective treatment has led many athletes to win Olympic medals. Recent examples of this are: Tom Dolan and Amy Van Dyken in swimming; Jackie Joyner Kersee in track; and baseball Hall of Famer, “Catfish” Hunter, just to name a few.

Exercise is very important, and your child needs it for his or her mind and body. If your child has asthma, it is important not to prohibit or limit participation in exercise activities, because exercise is a very important part of good health, both physically and socially. 

McKay

USED BOOKS, CD'S, MOVIES & MORE

explore
with your
child!

230 Papermill Pl Way
Knoxville

7734 Lee Hwy
Chattanooga

NEXT TO THUNDER
CREEK HARLEY DAVIDSON

STORE HOURS

9am-9pm Mon-Thurs

9am-10pm Fri/Sat

11am-7pm Sun

(SEASONLY STORE
HOURS WILL VARY)

MCKAYBOOKS.COM



Marek M. Pienkowski, M.D., Ph.D. was educated in clinical immunology at Johns Hopkins School of Medicine in Baltimore and internal medicine at Henry Ford Hospital in Detroit. Dr. Pienkowski has been serving patients in East Tennessee with allergies, asthma and immunological disorders for nearly 30 years through Allergic Diseases, Asthma & Immunology Clinic, P.C.. Active both in biomedical research and academia, he has published more than sixty scientific papers as well as two books.

