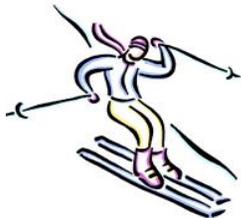


Sports Medicine Monthly

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COMMON MEDICAL ILLNESSES IN ATHLETICS: ASTHMA



Over the years, we have focused mostly on orthopedic concerns as they pertain to sports medicine. This is simply because most of the challenges to our athletes are orthopedic in nature. However, athletics also involves much more than just ankles and shoulders. Many times our athletes are not necessarily limited in their performance by an injury but instead by an illness. And, unlike an ankle sprain, a medical illness may be harder to recover from. Therefore, we are going to spend the next several issues discussing common medical illnesses that can sometimes sideline an athlete. As a quick review, here are a few topics we have discussed in the past.

November 2009:

Skin Lesions, MRSA, and Weight Management

April 2010:

Diabetics in Athletics

April 2011:

Sudden Cardiac Arrest in Athletics

August 2011-May 2012:

Concussions: Management and Recovery

All past editions of Sports Medicine Monthly are available and free-of-charge at our website: www.csosortho.com.

Information in this newsletter has been gathered from :

The National Asthma
Education and Prevention Program
2007 Full Report
&

The National Athletic Trainers' Association Position Statement:
Management of Asthma in Athletes

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Asthma: Just the Facts

Defining Asthma:

A common chronic disorder of the airways that is complex and characterized by variable and recurring symptoms, airflow obstruction, bronchial hyperresponsiveness (i.e. exaggerated constrictor response), and underlying inflammation. Asthma prevalence is estimated to be between 12-15% of the general population and as high as 23% in one study in school-aged children.



Age:

Asthma symptoms that begin prior to the age of 3 are usually congenital in nature and have a greater likelihood of long-term complications. By contrast asthma symptoms that begin after the age of 3 are less likely for long-term complications and usually respond better to treatment.

Asthma Attacks:

What is Happening?

In response to allergens, irritants, colder weather, or even aspirin or common NSAIDS such as Ibuprofen or Aleve, the bronchial tubes and their respective branches narrow. As such stimuli continue, inflammation and thereby swelling of the bronchial passageways occur and further narrows the space available for air transfer.

Signs and Symptoms:

- Chest Tightness
 - Wheezing
 - Coughing (especially at night)
 - Prolonged Shortness of Breath
 - Difficulty Sleeping
 - Inability to catch one's breath
 - Use of accessory breathing muscles
- *Usually 5-8 minutes after intense exercise begins



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Management and Treatment of Asthma

Living with asthma is nothing new. Likewise, succeeding in athletics with asthma is nothing new either. In fact, at least 1 in 5 athletes for the United States Winter Olympic Team in 1998 were asthmatics. Furthermore, Amy Van Dyken, an athlete who suffered from fairly severe asthma, won 4 gold medals in swimming in the 1996 Summer Olympic Games. The success is in the management.



Looking again at The National Asthma Education and Prevention Program 2007 Report, there are four components of asthma management.

- #1. *Accurate Diagnosis by a Medical Doctor:*
-Assessment, Monitoring, and Follow up
- #2. *Education and Partnership in Asthma Care*
-Parents, Patient, and Physician
- #3. *Controlling Complicating Factors*
-Allergens, Cigarette Smoke, Meds, etc...
- #4. *Pharmacologic Therapy*
-Inhalers, Nebulizers, etc...

Other Key Management Points:
The most common reason why asthma attacks occur is patient non-compliance with medication and dosage directions.

Asthma patients who have to use a fast-acting inhaler more than 2x per day to manage an attack are classified as unsuccessful in their asthma management, and they need to follow up with their physician.

Using a fast-acting inhaler such as albuterol 5-10 minutes immediately following a warm-up and prior to intense exertion is quite effective at reducing the likelihood of asthma attacks later on in the activity.



Asthma or Out of Shape?

In athletics, cardiovascular conditioning is a must. Whether it comes in the form of an up-tempo practice, running suicides, or doing bear crawls, there is just no way to get around it. So how do you as a coach or a parent know whether an athlete is having an asthma attack or whether they are just out of shape? Here are a few general guidelines:

-Have they been diagnosed with asthma?

-Is it the first few weeks of practice or midseason?
*Conditioning comes with time and consistency. If it's midseason, you might have a concern.

-As for the weather:

- A. Is it hot or cold?
- B. Is it dry or moist?
- *Cold and dry air pulls moisture out of the airway and increases the likelihood of an asthma attack.

-In attempting to catch their breath, is the athlete:

- A. Bent over or standing up?
- B. Quiet breaths or Wheezing?
- C. Visibly fatigued or visibly concerned?
- *Keep in mind than an athlete who is having an asthma attack is desperate to get air. They will force themselves to stand tall, will probably wheeze, and have a visible concerned look on their face.

A Note to the Reader.....

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