EXERCISE-INDUCED BRONCHOSPASM

Description

Exercise-induced bronchospasm is a condition marked by narrowing of the airways to the lung. It is most often seen after short periods of high-intensity exercise. The amount of narrowing is not usually severe, so exercise rarely stops when the narrowing takes place. Instead the athlete usually has a variety of symptoms that may affect both training and performance. Recovery usually takes about 1 hour.

Common Signs and Symptoms

- Wheezing (high-pitched sounds with breathing)
- Coughing
- Dyspnea (increased work of breathing)
- Hyperventilation (rapid breathing)
- Chest pain
- Late-phase reaction (symptoms occurring 4 to 6 hours after exercise is completed)

Causes

The cause of exercise-induced bronchospasm is unknown. At present it is believed that the air we breathe either cools or dehydrates the lining of the airway, resulting in inflammation and narrowing of the airway in athletes who are susceptible to this condition.

Risk Increases With

- Viral infections
- Exercise in cold air
- Exercise in dry conditions
- Poor conditioning
- High-intensity exercise
- No warm-up before play
- Frequent exposure to allergens (substances that produce allergic reactions)

Preventive Measures

- Improve conditioning.
- Treat allergies.
- Breathe warm air (cover mouth and nose with a towel or scarf).
- Warm up before play.
- Warm down (gradually decrease intensity) before stopping.

Expected Outcome

The majority of patients with exercise-induced bronchospasm will do well with medical treatment, usually inhalers. However, uncontrolled symptoms can result in poor athletic performance, overtraining symptoms, and unnecessary avoidance of sports and conditioning programs.

Possible Complications

- Poor athletic performance
- Inability to condition as well as expected
- Side effects from medications

General Treatment Considerations

- Maintain regular conditioning.
- Run with a scarf or towel over your mouth in cold, dry air.
- Warm up at least 10 minutes before high-intensity exercise.
- Warm down after play.
- Treat allergies.

Medications

- The usual initial medication is an albuterol inhaler, a medication that works to expand the airways.
- The second-line medication is inhaled corticosteroids, which reduce inflammation in the airway.
- Alternative medication are sodium cromoglycate and nedocromil inhalers.
- Long-acting medications such as salmeterol can also be used as second-line medications.
- Newer medications (such as zileuton [Zyflo] and zafirlukast [Accolate]) are being evaluated for their role in treatment.

Activity

No activity restrictions are expected if symptoms are well controlled by medications. In certain circumstances (cold weather, allergy season, recent upper respiratory infection), training may need to be altered.

Diet

No specific diet is recommended.

Notify Our Office If

- There is an increase in fatigue with exercise
- Increased difficulty breathing occurs with exercise in cold weather
- You note high-pitched noises (wheezing) with increases in exercise intensity
- You appear to be breathing harder and faster than expected with training
- Allergies appear to be uncontrollable
- You experience chest pain with exercise

Notes: (Up to 4400 characters only)

Notes and suggestions