“Burnout” in Young Athletes (Overtraining Syndrome)

Burnout, or overtraining syndrome, is a condition in which an athlete experiences fatigue and declining performance in his/her sport despite continuing or increased training. Overtraining can result in mood changes, decreased motivation, frequent injuries and infections.

How it Occurs

Burnout is thought to be a result of the physical and emotional stress of training. Many athletes have some initial decrease in performance when they increase their level of training. Generally, however, after a short recovery period the athlete will see an improvement in performance. Overtraining syndrome happens when an athlete fails to recover adequately from training and competition. The symptoms are due to a combination of changes in hormones, suppression of the immune system (which decreases the athlete’s ability to fight infection), physical fatigue and psychological changes.

Risk Factors

There are many factors are thought to increase the risk of developing overtraining syndrome including:

- Specializing in one sport
- Sudden and large increases in training
- Participation in endurance sports
- High anxiety level
- Low self esteem
- Pressure from parents/coaches

Signs & Symptoms

In the young athlete, signs and symptoms of burnout can be highly variable and can include:

- Chronic muscle and joint pain
- Weight loss and loss of appetite
- Increased heart rate at rest
- Decreased sports performance
- Fatigue
- Prolonged recovery time
- Lack of enthusiasm
- Frequent illnesses
- Difficulty completing usual routines
- Decreased school performance
- Personality or mood changes
- Increased anger or irritability
- Sleep disturbances (difficulty sleeping, or sleeping without feeling refreshed)

These are warning signs of unhealthy sports participation, which may increase the risk of burnout:

- The athlete is no longer having fun playing sports.
- The athlete's sport is dominating his/her and his/her family's life.
- The only topic of conversation at home or at the dinner table is the child's sports.
- The athlete is rewarded on how they perform in sports.
- The athlete has missed 10% of his/her season and has not yet seen a doctor.
- The only important thing to the athlete or parent is winning.
- A female athlete is now 16 and has not yet started her period.
- The athlete is dieting just to become a faster runner.
- A young athlete only plays one sport and is unwilling to try any others.

**Diagnosis**

There is no test for overtraining syndrome. The diagnosis is based on an athlete's story, the symptoms that he/she reports, and the absence of an alternative explanation for these symptoms.

**Treatment**

The only treatment for burnout is rest. The athlete should stop participation in training/competition for a set period of time. The time required varies (generally 4-12 weeks) depending on several factors, including the type of sport, level of skill and competition, and severity of symptoms. During the rest period, the athlete can participate in short intervals of low intensity aerobic exercise to help keep active and fit; this type of activity should be unrelated to his/her sport.

**Returning to Activity & Sports**

When the signs and symptoms of burnout have resolved completely (including physical symptoms, mood changes, sleep disturbances, etc.), the athlete may begin slowly to reintroduce training. Athletes should increase the duration of activity before increasing the intensity of activity. If symptoms begin to recur when training is restarted, the athlete should again initiate a rest period and reevaluate the training approach.

**Preventing Burnout**

Specific guidelines for trainers/coaches/parents include:

- Make training fun and interesting with age-appropriate games and workouts
- Keep the training regimen flexible with planned breaks 1-2 days per week and longer breaks every few months to allow for complete recovery
- Maintain a supportive environment for the athlete
- Teach the athlete to be aware of the cues from their body that indicate a need to slow down or change their training routine. Discuss the importance of overall health and wellness and be open to conversations about these issues
Specific guidelines for the athlete include:

- Spend 1-2 days per week resting from organized sport participation or participating in alternate activities.
- Allow slightly longer breaks (a couple of weeks) from training and competition every 3 months. This time could be spent focusing on other activities and cross training without intensive training or competition.
- Maintain a healthy, balanced diet. Drink plenty of water.
- Listen to your body. Take a short break or alter your training if your body needs a change.
- Try to be a well-rounded athlete who participates in many different activities.