



Burnout Syndrome- Overtraining And Burnout in Young Athletes

KEYWORDS

Overtraining, Overuse Injuries, Signs & Symptoms, and Preventing Burnout.

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ABSTRACT *Injuries in the pediatric and adolescent athlete. As more young people are becoming involved in organized and recreational athletics, the incidence of overuse injuries is increasing. Many young people are participating in sports. This overtraining can lead to burnout, which may have a detrimental effect on the child participating in sports as a lifelong healthy activity. One contributing factor to overtraining may be parental pressure to compete and succeed. The purpose of this clinical report is to assist pediatricians in identifying and counseling at-risk younger communities and their families. This report supports the American Academy of Pediatrics policy statement on intensive training and sport specialization.*

INTRODUCTION

Burnout is a state of emotional, mental, and physical exhaustion caused by excessive and prolonged stress. It occurs when you feel overwhelmed and unable to meet constant demands. As the stress continues, you begin to lose the interest or motivation that led you to take on a certain role in the firm.

Overuse injuries, overtraining, and burnout among child and adolescent athletes are a growing problem. Although inactivity and obesity are on the rise, the number of children and adolescents who participate in organized or recreational athletics has grown considerably over the past 2 decades. It is estimated that 30 to 45 million youth 6 to 18 years of age participate in some form of athletics. Sports participation is more accessible to all youth, from recreational play and school activities, to highly organized and competitive traveling teams, to pre-Olympic training opportunities. The variety of available, organized sporting activities has also grown from the typical American favorites, such as football, baseball, and soccer, to include lacrosse, field hockey, rugby, cheerleading, and dance, each with its own list of sports medicine concerns. This report will assist the clinician managing young athletes by first defining the medical, psychological, and developmental concerns of intensive, focused athletic participation. In addition, it will highlight specific overtraining issues such as participation in endurance events, weekend athletic tournaments, year-round training on multiple teams, and the multisport athlete. This clinical report should be used in conjunction with the American Academy of Pediatrics policy statement on intensive training and sports specialization in young athletes. There is currently a very small body of scientific evidence pertaining to these issues. Therefore, some of the recommendations are based on committee opinion and/or expertise.

In today's society, highly-driven young athletes often struggle with overtraining syndrome. Children are often surrounded by the hype of sports and it is easy to see how a young athlete could push overtraining burnout young athletes themselves too far in their quest to be a great athlete.

As one would expect, when I playfully ask my young patients what they aspire to be when they grow up, a large number respond that they dream of being an Olympic or professional athlete. While this is a worthwhile and lofty positive goal, there can occasionally be a downside. Many young athletes will take training and competing too far.

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.

Overtraining in young athletes

A question often asked of the practitioner who cares for young athletes is, "How much athletic training is too much?" There are no scientifically determined guidelines to help define how much exercise is healthy and beneficial to the young athlete compared with what might be harmful and represent overtraining. However, injuries tend to be more common during peak growth velocity, and some are more likely to occur if underlying biomechanical problems are present.

A sound training regimen is essential, recognizing that although repetition is important, it may induce harm. Sport-specific drills that use a variety of modalities, such as water running for the track athlete on alternate days, may provide similar fitness benefits with less stress to the body. The American Academy of Pediatrics Council on Sports Medicine and Fitness recommends limiting 1 sporting activity to a maximum of 5 days per week with at least 1 day off from any organized physical activity. In addition, athletes should have at least 2 to 3 months off per year from their particular sport during which they can let injuries heal, refresh the mind, and work on strength, conditioning, and proprioception in hopes of reducing injury risk. In addition to overuse injuries, if the body is not given sufficient time to regenerate and refresh, the youth may be at risk of "burnout."

Rest is not included in a training program then regeneration cannot occur and performance plateaus. If this imbalance between excess training and inadequate rest persists

then performance will decline. Overtraining can best be defined as the state where the athlete has been repeatedly stressed by training to the point where rest is no longer adequate to allow for recovery. The "overtraining syndrome" is the name given to the collection of emotional, behavioral, and physical symptoms due to overtraining that has persisted for weeks to months. Athletes and coaches also know it as "burnout" or "staleness." This is different from the day to day variation in performance and post exercise tiredness that is common in conditioned athletes. Overtraining is marked by cumulative exhaustion that persists even after recovery periods.

Overuse Injuries in young athletes

An overuse injury is micro traumatic damage to a bone, muscle, or tendon that has been subjected to repetitive stress without sufficient time to heal or undergo the natural reparative process. Overuse injuries can be classified into 4 stages: (1) pain in the affected area after physical activity; (2) pain during the activity, without restricting performance; (3) pain during the activity that restricts performance; and (4) chronic, unremitting pain even at rest. The incidence of overuse injuries in the young athlete has paralleled the growth of youth participation in sports. Up to 50% of all injuries seen in pediatric sports medicine are related to overuse.

The risks of overuse are more serious in the pediatric/adolescent athlete for several reasons. The growing bones of the young athlete cannot handle as much stress as the mature bones of adults. For example, a young baseball pitcher who has not yet learned proper throwing mechanics (i.e., recruiting the entire kinetic chain from foot to hand instead of just the arm) is at risk of traction apophysitis of the medial elbow. A young gymnast who performs repetitive hyperextension activities may develop spondylolysis (i.e., a stress fracture of the spine), which is an injury particular to the pediatric age group. In addition, young swimmers may not recognize signs of rotator cuff tendinitis, because they may be unable to cognitively connect vague symptoms, such as fatigue or poor performance, as a sign of injury. Identifying youth at risk of overuse injuries is the first step to prevention. Guidelines for parents, coaches, and athletes need to be developed to provide opportunities for education, injury reduction, and early recognition of overuse injuries.

What is burnout or overtraining syndrome

Burnout or overtraining syndrome occurs when an athlete has worsening performance despite intense training. It is believed to result from a multitude of factors, such as constant high levels of physiologic or emotional stress, fatigue, immune system failure, or insufficient recovery time.

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
- Youth Sports Burnout

Most of us are familiar with feeling burned out. What you might not know is that young athletes are capable of getting burned out, too. Burnout is defined by sport psychologists as "physical/emotional exhaustion, sport devaluation, and reduced athletic accomplishment". This is an important issue in youth sports because it is thought to contribute to dropping out of sports altogether. Given the tremendous benefits that accompany exercise and sport participation, the athlete who gives up sport participation is also giving up the important health benefits. Even at a young age, children are developing lifestyle patterns that will carry over into adulthood. Active youth are much more likely to be active adults. But if we allow our youth to become burned out of sports, this may become a barrier to leading a healthy lifestyle as an adult.

My Child at Risk of Overtraining/Burnout

- Early sports specialization – focusing on one sport from a young age
- Playing one sport, but competing on multiple teams during a season
- Overlapping seasons without intervals of rest
- Year-round participation without an "off season"
- "Type A" personality including ambitious, determined, driven, intense
- Low self-esteem and high anxiety levels
- Parental or coaching pressure to train and compete at a higher level

Signs & Symptoms in young athletes

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)

Treatment in young athletes

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.

Preventing Burnout in young athletes

If you notice these symptoms occurring in your child, or members of your team, what should you do to combat or prevent burnout? There are several strategies that you might try.

First, start with taking time off from the sport, or cut back on the time that is being invested in the sport. One way to do this is to participate in whichever sport happens to be in season, rather than specializing in one sport. You could also cut back on the number of days required for practice or the length of each practice.

A second way to prevent or deal with burnout is to teach your child relaxation and stress management techniques.

Thirdly, look at what pressures they might be experiencing. Are there pressures at home or by the coach to win, win, win? Does the athlete have control over his/her own participation, or is there someone forcing them to continue with participation. Sports are expensive, some more costly than others. If a child realizes the financial and time investment made by the parents and themselves in their participation, they may feel pressure to continue even though they may have lost enjoyment in the sport. As we have said, this can lead to decreased performance and burnout. Give your child increased involvement in making sports-related decisions and they will feel more in control.

Finally, look at their interactions with their teammates. Help them by providing positive social support and encouraging positive thoughts about their role on their team.

Athlete burnout is a very preventable syndrome that occurs far too often in modern day youth sports. By being aware of what causes burnout, what signs to look for, and ways to deal with it, you can help your child on his/her way to a positive youth sports experience. Should you happen to find yourself with a burned out athlete, chances are if you catch it early some time off and a change of athletic scenery will help tremendously.

The following guidelines are suggested to prevent overtraining/burnout:

Keep workouts interesting, with age-appropriate games and training, to keep practice fun.

Take time off from organized or structured sports participation 1 to 2 days per week to allow the body to rest or participate in other activities.

Permit longer scheduled breaks from training and competition every 2 to 3 months while focusing on other activities and cross-training to prevent loss of skill or level of conditioning.

Focus on wellness and teaching athletes to be in tune with their bodies for cues to slow down or alter their training methods.

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.

Conclusion

Overtraining and burnout share many common symptoms, such as decreased performance, tiredness, sleep disturbance, carelessness, and sensitivity to infection. There is no single test for diagnosing professional burnout or overtraining syndrome. In athletic overtraining, hypothalamic neuroendocrine functions are disturbed, sympathetic tonus is increased, and inflammatory factors possibly activated. It is not yet known how various factors (e.g., psychological, physiological, immunological) play a role in preventing athletes' recovery from training and competition. Considering the amount of factors shared between the two conditions, it is possible that even moderate exercise may worsen severe burnout.

In our experience, a practical tool when monitoring health condition, recovery, or the effects of training. The results are most valuable when observing the development of physical conditions of one person or a group of athletes over a period of time rather than drawing conclusions after a single visit. Clinical diagnoses of underperforming athletes remain to be based mainly on the athletes' medical history. In order to make the overtraining syndrome and easy to preventing burnout syndrome.

REFERENCE:

1. American Medical Association. (1966). Standard nomenclature of athletic injuries. Chicago, IL: American Medical Association.
2. Budgett, R. (1994). The over-training syndrome. *British Medical Journal* 309:465-468.
3. Eklund, R. C., & Cresswell, S. L. (2007). Athlete burnout. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (3rd edn., pp. 621-641). Hoboken, NJ: Wiley
4. Orava S, Puranen J. Exertion injuries in adolescent athletes. *Br J Sports Med*. 1978;12:4-10.
5. Kentta, G., Hassmen, P., & Raglin, J.S. (2001). Training practices and overtraining syndrome in athletes. *International Journal of Sports Medicine*, 22, 460-465.
6. Weinberg, R.S., & Gould, D. (2007). *Foundations of sport and exercise psychology* (4th ed.). Champaign, IL: Human Kinetics.
7. Ehmann, M., Foster, A., Keul, J. (1993). Overtraining in endurance athletes: a brief review. *Medicine and Science in Sports and Exercise* 25 (7):854-862.