

GUEST COMMENTARY

How to avoid overuse injuries in youth sports

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Winter is officially over; and with a little luck, warm and breezy spring weather will be here soon. Before you know it, kids of all ages will be suiting up for spring training. I can almost hear the crack of a bat and the hollow pop of a soccer ball. Participation in organized sports is growing in numbers, with more than 35 million players each year. And with good reason; playing a sport not only helps develop muscle, but it shapes other skills as well. Experiencing a personal best or coming together with others as a team can be a memorable life lesson, and parents are becoming more and more supportive as children and teens clamor to take their place on a team. It is a great way for kids to spend time with friends having fun, and it also sets them up to a lifelong habit of exercise.

Today's young athletes, even as young as 8 or 10, are focused and many compete on an expert skill level. In many cases, a young athlete may devote him or herself to one sport and train year round. While it is great to reach for the stars and commit to excellence on the soccer field, the baseball field, or whatever sport they may choose; overuse injuries become a risk when training at this level. As a physical therapist, I treat a growing number of kids for trauma to bone, muscle, and tendons. According to Safe Kids USA, overuse injuries account for nearly half of all middle school and high school injuries. Many of these injuries can be prevented by proper training; as well as paying attention to warm-ups, cool-downs, nutrition and hydration.

Children and teens are more vulnerable than adults to overuse injuries because they grow so rapidly. Muscle, bone, and tendon growth takes place in fits and starts in a young body—and many times that uneven growth can create an imbalance. Training intensely for a singular sport engages the same muscle group and year-round training can short-change rest and recovery time. Overuse injuries such as soft tissue strains and sprains, shin splints, shoulder, elbow, hip and thigh injuries, and ACL and Achilles tendon are common under these circumstances. Although these injuries are treatable and can have a fast recovery time, they can cause discomfort and result in time spent on the bench.

How to Tell if Your Child has an Overuse Injury

To help keep your kid in the game and reduce risk of injury, it pays to be aware of the potential so that you can recognize it when you see it. Sometimes, we have to look for indicators of injury because children can't always communicate feelings of pain or fatigue when they feel it, and they may be under pressure to compete.

Telltale signs of overtraining:

- Child shows less interest in practice.
- Pain that increases with the activity.
- Swelling.
- Change of technique.

Treatment

Physical therapy for an overuse injury centers on healing the pain at the specific site and then working to correct the imbalance within the body. Inflammation and swelling are addressed first to relieve pain and increase mobility. At Peak we use a combination of electrical stimulation, cold laser therapy, ultrasound, massage, and hot/cold therapy. The therapist will then work to stretch and mobilize joints, tendons, and muscle to increase range of motion and flexibility. Once pain and swelling has been reduced and mobility has been restored, the patient is ready to train the muscle(s) for strength, coordination and power. The good news is that after going through physical therapy for an injury, many young athletes actually get back in the game stronger and with an enhanced skill set.

Prevention**Cross Training**

The best way to protect your child from the risk of overuse injuries is to encourage cross-training. A strong core is the base of strength in the human body, and not all exercise and sports activities engage the core. Pilates-based exercise and the use of certain specialized equipment i.e. the Bosu ball, medicine balls, and Swiss balls can be used to address core weakness.

Nutrition and Hydration

Nutrition and hydration are also key elements in keeping your child safe from injury. Our bodies are 2/3 water, so it is important to replace fluids during activity. Even mild dehydration can physically or mentally affect a young athlete, increasing risk of injury. It is also important for your child or teen to keep up with his or her growing body with proper nutrition, especially before practice and on game day. Lack of nutrients can lead to fatigue, elevating the risk of injury during play.

Warm up and cool down.

Make sure your son or daughter is participating in proper warm-up exercises before a work out. These exercises make the tissue warm and flexible; reducing the chance of injury. Cool downs are equally important—vigorous exercise can cause dizziness, so your youngster needs to walk it off to ensure safety.

A child's participation in organized sports can be exciting and fun for the whole family. By following a few guidelines; such as ensuring proper training and conditioning, paying attention to nutrition and hydration, and teaching your child the importance of warm-ups and cool-downs, you can protect him or her from many common injuries.

Eric Edelman is a Norwell resident and the owner of Peak Physical Therapy in Norwell, with locations in Quincy and Scituate. Peak Physical Therapy specializes in Sports Medicine, Spine Therapy, Orthopedics, Vestibular Disorders, Women's Health Issues, and TMJ Dysfunction—joining art and science through hands-on manual therapy with high-tech treatment and training. Peak Physical Therapy also has an aquatic program for patients with severe pain and those that would benefit from reduced weight-bearing exercise.

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