

# footprints

An informational newsletter for patients of APMA member podiatrists

Fall 2011

## The Pursuit of Health, Happiness, and Sports Injuries



With the changing leaves and cooler weather, fall is the perfect time of year for outdoor fun. Millions of adults will participate in sports: football, soccer, basketball, baseball and softball, and running, to name a few. Whether you are skilled, an amateur, or enjoy individual activities—adults will get active for all of the health benefits exercise has to offer.

However, for some people—particularly those who overdo or who don't properly train or warm up—these benefits can come at a price: sports injuries.

The types of sports-and-exercise related injuries most commonly seen by a podiatric physician are the following:

**Ankle sprain** is a common injury to the ligament, one of the bands of tough, fibrous tissue that

connects two or more bones at the joint and prevents excessive movement of the joint. Sprains that do not show improvement in three days should be seen by a podiatric physician. Investing in five to 10 minutes of stretching and warming up and wearing the right shoe for the sport you are participating in can help prevent this common athletic injury.

**Muscle strain** is defined as either a partial or total tear of muscle fibers in the muscle itself or the origin of the muscle. Exercisers frequently strain their lower leg and foot muscles during rapid movement sports such as tennis, basketball, racquetball, running, and sprinting. Improper and inadequate warm-up and stretching are some of the contributing factors in this type of injury. Minor strains should heal in 1-2 weeks with rest. If pain lingers longer, consult a podiatrist.

**Tendinitis** is a common type of ankle and foot problem, defined as an inflammation of the tendons—the tissue that connects muscles to bones. The most common, Achilles tendinitis, is where inflammation is located at the back of the leg where the tendon attaches to the foot (heel pain). In sports, a tendinitis injury is usually the result of abnormal foot biomechan-

ics, excessive foot pronation (tendency of the arch of the foot to flatten out too much), and history of overuse in a specific sport (e.g., basketball, tennis, running, volleyball), which requires continuous high-impact repetitive movements. Contact your podiatrist if ankle pain does not improve or worsens after a few days of rest and ice therapy.

**Stress fractures** are hairline breaks resulting from repeated stress on the bone. High-impact sports such as running, gymnastics, and volleyball can increase the risk of stress fractures. To prevent stress fractures, wear shoes that provide sufficient padding and support when you walk, run, dance, or perform any other activities that stress the bones of the foot. If continued pain persists, contact your podiatrist.

**Plantar fasciitis (heel pain)** is caused by inflammation of the connective tissue that stretches from the base of the toes, across the arch of the foot, to the point at which it inserts in the heel bone (the soles of your feet). Inflammation is caused by overuse with excessive foot flattening and is aggravated by tight calf muscles. Aerobic activities such as walking or running are usually related to this injury, but it can also result from basketball, football, or softball. Customized orthotics (custom devices for shoes), along with an appropriate stretching program, may be prescribed by your podiatrist to help alleviate pain.

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## The Pursuit of Health, Happiness, and Sports Injuries *continued*

The following precautions should be taken to prevent sport-related injuries:

- Don't be a "weekend warrior," packing a week's worth of activity into a day or two. Try to maintain a moderate level of activity throughout the week.
- It is extremely important for anyone participating in a sport to properly warm up prior to actually participating in the sport.
- Learn to do your sport right. Using proper form can reduce your risk of "overuse" injuries such as tendinitis and stress fractures.
- Remember safety gear. Depending on the sport, you may need knee and wrist pads or a helmet.

- Accept your body's limits. You may not be able to perform at the same level you did 10 or 20 years ago, nor will you recover as quickly. Modify activities as necessary.
- Increase your exercise level gradually; strive for a total body workout of cardiovascular, strength training, and flexibility exercises. Cross-training reduces injury while promoting total fitness.

*Tip:* Whether an injury is acute or chronic, there is never a good reason to try to "work through" the pain of an injury. When you have pain from a particular movement or activity, STOP and GET IT CHECKED.

### Kids "Fall" Back into School Sports

As kids head back to school, they also get back into participating in team and individual sports. Children active in sports programs will improve their cardiovascular and musculo-skeletal systems, coordination, and state of mind. In addition, sports help children make friends, have fun, learn to play as a member of a team, learn to play fairly, and improve self-esteem.

Every child matures physically at his or her own rate and has a different degree of athletic ability. No amount of training can improve a child's natural athletic ability, but training helps improve coordination and therefore performance. Parents should encourage their children to participate in sports but never forget that competition should be fun.

One of the most important ways to avoid injuries in all sports is stretching and warm-up exercises before beginning the activity. Warming up helps loosen muscles and prevents injuries in athletes of all ages. In addition, it's extremely important to wear the correct shoes for the sport. Your podiatrist can help you choose the right shoes for your children.

According to podiatrists, overuse injuries occur from repetitive actions that put too much stress on the bones and muscles. All kids who play sports can develop an overuse injury. Foot injuries commonly seen in very active children include:

**Blisters** are caused by friction when shoes and socks rub repeatedly on the skin. Keep your child's feet as dry as possible; wet shoes, boots and socks will cause blisters far more quickly than dry ones. Consult with your local podiatrist to ensure that shoes fit correctly and for treatment of blisters, especially if your child has diabetes.

**Sever's Disease** is an injury to a child's developing foot structure, specifically an inflammation in the heel's growth plate due to muscle strain and repetitive stress. It is common in young athletes and children between 8-14 years of age, when the child's bones are still in the growth stage and the growth plates have not become solidified. Rest, ice, and a padded heel insert--and in some cases, custom foot orthotics--are some treatments usually prescribed by a podiatrist for this condition.

**Turf toe** is a painful hyperextension of the big toe joint typically caused by playing on artificial turf or grass. Children involved in sports played on grass or turf (e.g., baseball, soccer, and football) should be particularly careful. The remedy is usually "RICE" (Rest, Ice, Compression, Elevation) and orthotics (custom devices for shoes) prescribed by your podiatrist.

**Shin splints** are micro-tears or inflammation of the anterior leg muscles that cause pain and discomfort on the front of the lower parts of the legs. They are often caused by repeated running on hard surfaces or overtraining at the beginning of a sports season. Some ways of preventing this injury are proper stretching and warm-ups, wearing shoes designed for your child's sport, and custom orthotics (custom devices for shoes).



Doctors of podiatric medicine are podiatric physicians and surgeons, also known as podiatrists, qualified by their education, training, and experience to diagnose and treat conditions affecting the foot, ankle, and related structures of the leg.