

Treating athletes – the role of podiatry

Podiatric treatment is recommended for all athletes for the prevention and treatment of sports-related injuries. Treatment for sports lower limb and foot injuries includes screening and assessment of posture and movement, and may include biomechanical analysis. Painful corns, bunions, shin splints or other injuries can all be caused by biomechanical variants that can be corrected by the evaluation of sports shoes and the possible fitting of orthotics. A podiatrist can evaluate an athlete's biomechanics to determine the degree of pronation, and provide treatment to help restore a neutral foot posture in the athlete's stride. Overuse injuries involving the skin and nails also benefit from podiatric treatments, and in some cases minor surgical procedures for problems such as ingrown nails. Some injuries benefit from sports massage therapy and corrective exercise regimes. Below is a list of the top podiatric sports injuries:

1. Plantar fasciitis

Cause: inflammation of the arch fascia due to over-stretching.

Treatment: management of the inflammation, stretching and orthoses to support the foot.

Prevention: gait and biomechanic analysis from a podiatrist, who can recommend appropriate footwear, stretching or orthoses.

2. Ankle sprain

Cause: sudden movements when dodging, twisting or spinning that cause the ligaments supporting the ankle joint to stretch and overextend, sometimes to the point of tearing.

Treatment: immediate return to play may be possible dependent on the severity of the strain, immediate intervention may include local anti-inflammatory medication to reduce swelling and strapping of the ankle joint for stability. Following that, rest, ice, compression, elevation and stabilisation is required.

Prevention: strapping to help stabilise a pre-existing injured ankle, and complete rehabilitation of any existing ankle sprain as most of these injuries occur on already injured ankles.

3. Chondromalacia patella (runner's knee)

Cause: misalignment of the patella when running or jumping, causing the cartilage around the knee to wear down. This misalignment is often brought on by gait problems.

Treatment: NSAIDs to reduce inflammation, rest, ice, compression, elevation and stabilisation. Surgery may be required.

Prevention: gait analysis to ensure undue pressure isn't placed on the patella through biomechanics of the feet; orthoses; leg strengthening exercises to support the patella.

4. Achilles tendonitis

Cause: inflammation of the Achilles tendon due to overuse and/or excessive pronation of the foot, which forces the tendon out of alignment.

Treatment: NSAIDs to reduce inflammation, rest, ice, strengthening exercises. If the Achilles actually tears as a result of trauma, surgery may be required.

Prevention: Strengthening exercises can significantly reduce the risk of damage to the Achilles tendon.

5. Shin splints

Cause: pain running down the length of the shin caused by running on hard surfaces, such as pavements, and overuse.

Treatment: rest and ice will relieve immediate discomfort. Orthoses may be fitted to improve the foot posture.

Prevention: Well-fitting footwear that has adequate cushioning and training schedules that change training surfaces on a regular basis.



This resource has been provided by an Australian Podiatry Association (APodA) member podiatrist as part of Foot Health Month 2014

Celebrating Foot Health Month – October 2014

Athletes and podiatry



High-impact sports such as basketball, soccer, football and cricket – really any sport involving use of your feet - can lead to injuries requiring podiatric treatment. Sports podiatry looks specifically at injuries to the foot, ankle and lower leg sustained through participation in physical activity. It is easy to injure your feet while playing sport, as the forces between your feet and the ground are amplified during high-impact activity.

Injuries of the foot and lower limb come in two forms. The first is overuse injuries caused by repeated pressure on tendons and joints, the second is movement or biomechanical injuries caused by the way your feet are impacting with the ground, and incorrect movement patterns. Movement injuries are often impacted by overuse problems, as you may be changing the way you walk, run or jump to compensate for an existing injury. This can cause other injuries, as you move in a different way to what would come naturally.

The most prevalent sports injuries include shin splints, Achilles tendonitis, tibialis posterior tendinopathy, runner's knee, corns and bunions. Runners may complain of thickened nails that are often ingrown. Long distance running is grueling on feet, and unsightly nails are a standard consequence.

Over-pronation is a particularly common problem among athletes. This leads to joint misalignment, as your feet are constantly moving in a way that is less efficient, and your joints realign themselves to compensate for this. When you run, your foot hits the ground in a very specific pattern. The outside of your heel takes the initial impact and then your foot turns inward to spread the impact across the front of your foot. It's how our feet absorb shock and adjust to uneven terrain. Over or under-pronating can lead to injury, especially when this movement is repeated regularly. People with low arches often suffer from problems through the arch of the foot.

Over-pronation increases strain on muscles and tendons as they have to work harder to provide support to your joints. Common injuries resulting from over-pronation include sprained ankles and torn tendons and ligaments, as your foot is rolling out too far before rolling back in again, providing unstable support that is difficult for your tendons to reinforce. Achilles tendonitis, posterior tibialis tendinopathy and shin splints can all be attributed to over-pronation. These injuries are likely to be cause or made worse by repetitive strain often known as overuse injuries.

Treatment for sports injuries includes screening to look at your posture and movement, and analysis of how the movement of your feet affects your lower limbs. Painful corns, bunions, shin splints or other injuries can all be caused by unnatural movement patterns that can be corrected by evaluating sports shoes, and with orthoses or other in-shoes therapies. Overuse injuries involving the skin and nails also benefit from treatments, and, in some cases, minor surgical procedures. Some injuries benefit from sports massage therapy and corrective exercise regimes.



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