

# Lateral Ankle Sprains – The most common injury in sports

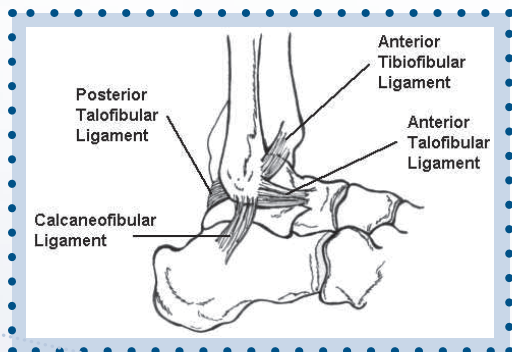
By Tryg Odney, Sports Medicine Outreach Manager, Sanford USD Medical Center



Tryg Odney, MA, ATC

Lateral ankle sprains are the most frequent injuries which occur in sports. Because of their frequency and disability which results, they present a significant hurdle for coaches, athletic trainers and anyone else involved with the athlete.

The ankle is a hinge joint formed by the articulation of three bones: the talus, the tibia and the fibula. The ankle structure has numerous ligaments which enhance its stability. The lateral, or outside, aspect of the ankle is supported by three ligaments: the anterior and posterior talofibular ligaments and the calcaneofibular ligament. There are two ligaments relevant to the ankle which connect the tibia and fibula: the anterior and posterior tibiofibular ligaments. The deltoid ligament crosses the ankle on the inside. The relative weakness of the outside ligaments as compared to the deltoid ligament in addition to the structural make-up of the bones contributes to the high incidence of lateral ankle sprains.



The typical mechanism of injury is inversion or turning the foot inward and it may be combined with plantarflexion or pointing the toes downward. An excellent example of this would be a basketball player jumping and landing on another player's foot.

Lateral ankle sprains are usually graded by the severity. Grades I, II and III are often correlated with a mild, moderate and severe injury, respectively. The signs and symptoms will vary with the degree of injury. Grade I sprains will present with pain and swelling over the anterior aspect of the lateral malleolus (bony bump on the outside of the ankle) as well as point tenderness over the anterior talofibular ligament. A Grade II ankle sprain will present with pain and swelling over outside ligaments as well as point tenderness over these structures. They may also exhibit point tenderness over the posterior talofibular ligament. Positive ligamentous stress tests will be present with a Grade II ankle sprain as well. Grade III ankle sprains will present with diffuse swelling over the entire outside aspect of the ankle and there may be swelling across the front of the ankle. Palpation will be very painful around the entire outside aspect of the ankle and positive ligamentous stress tests will be present.

Immediate treatment of a lateral ankle sprain begins with an evaluation for any existing emergencies. If a fracture or dislocation is suspected, immobilization and immediate referral are necessary! Standard care for an ankle injury consists of the four steps within the RICE acronym (R = Rest, I = Ice, C = Compression, and E = Elevation). If the athlete is unable to walk without a limp, they should be fit with crutches. Following the initial care of the injury, a rehabilitation program should be initiated to restore full range of motion, flexibility,

strength and balance. After all of these goals have been achieved and the athlete is able to perform sport specific activities without limitations, the athlete may return to competition.

This is a brief overview of some general characteristics to look for when dealing with a lateral ankle sprain. In order to ensure proper care and treatment of an ankle injury, it should be evaluated by a certified athletic trainer or physician. Remember, prompt, proper and conservative treatment results in less time lost and a quicker, safer return to sports.



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