

FOOT & ANKLE INJURIES

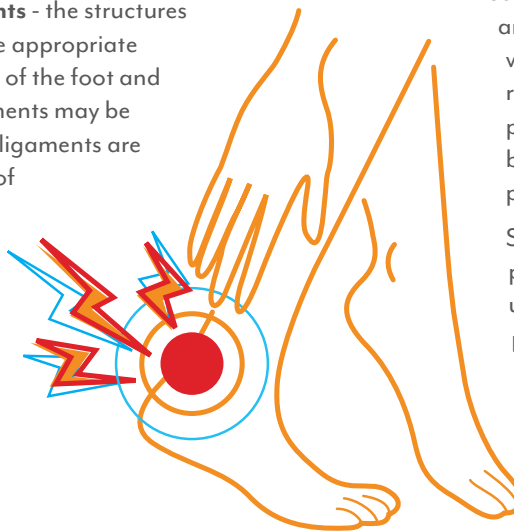


PREPARED BY DR. THOMAS I. SHERMAN, M.D.

The world's beautiful game has resulted in some ugly ankle injuries. In fact, ankle problems are relatively common for today's soccer players and represent up to 40% of all injuries sustained by footballers. The most frequent of these is an ankle sprain. Additionally, avid players, elite and recreational alike, may develop overuse problems, tendon injuries, and even complex fractures (breaks) of the various bones in the foot and ankle.

ANKLE SPRAINS

A sprain is an injury to ankle ligaments - the structures responsible for holding the ankle in the appropriate alignment. Depending on the position of the foot and the motion of the body, different ligaments may be injured. The most commonly affected ligaments are those on the outside or lateral aspect of the ankle. The typical mechanism by which these occur is landing on another player's foot, or rolling the ankle with the foot pointed down and inward. The severity of the ankle sprain is dictated by multiple factors, the most important of which is the energy imparted by the injury to the ankle.



in a boot may be required. Rest is essential to allowing the ankle to heal. Ice will help decrease swelling and reduce pain. This should be done 10-20 minutes every 1.5 to 2 hours for the first 2 to 3 days. Compression and elevation help reduce swelling.

If there is difficulty bearing weight and/or significant swelling and pain, medical attention is required to ensure there is no fracture (break in the bone) by taking X-rays. Medications to decrease inflammation may be prescribed. Finally, referral to a physical therapist may be required to facilitate an expedient recovery. Focus is typically given to restoring balance and strength. Return to play is recommended when normal motion is restored, strength is regained, and impact activities are no longer painful. Consideration may be given to taping or bracing the ankle during the initial return to play period.

Sometimes the sprained ligament does not heal properly, and the ankle continues to remain unstable despite following the typical rehabilitative process. When this is the case, surgery is required. Here, the ligament is surgically repaired or reconstructed. Often, an ankle arthroscopy will be performed at the same time. This is a minimally invasive technique to treat injuries to the joint surfaces.

This is performed on an outpatient basis and return to full play is typically in 3 to 4 months.

GRADE I SPRAIN

Recovery process = 2-10 days

1

2ND DEGREE SPRAIN

More severe
Excessive abnormal motion of the ankle
Difficulty with impact activities
Recovery process = 10-30 days

2

3RD DEGREE SPRAIN

Severe swelling
Instability of the ankle
Inability to bear weight
Recovery process = 1-3 months

3

ANKLE JOINT INJURIES

Sometimes, athletes may develop injuries to the joint surfaces.

These are often associated with instability of the ankle such as recurrent sprains. If left untreated, these injuries, known as osteochondral lesions of the talus or osteochondral defects, may lead to persistent pain and even progress into arthritis.

Players with these injuries will typically have persistent ankle pain, particularly with impact activities. They may experience swelling with activity, and even feel popping or grinding when moving the ankle.

These injuries are typically diagnosed by MRI. Sometimes surgery is required. This typically consists of removing the injured surface and promoting a healing response or even repairing the damaged portion of the joint surface with graft material. Seeking treatment with an orthopedic foot and ankle surgeon specialist is advisable when this type of problem is suspected.

Soccer players are tough on their feet and ankles. With hours of dedication to practice and gameplay, most players will experience an injury to their foot and/or ankle at some point during their career. By ensuring appropriate treatment, time away from the game can be minimized while still promoting optimal healing.

Regardless of the severity, the initial treatment should consist of **PRICE therapy: Protection, Rest, Ice Compression, and Elevation**. It is vital to protect the ankle from further injury by avoiding pain inducing activities. With severe sprains, immobilization of the ankle