

Ankle Injuries in Soccer

"I can't really apologize for being injured. It's one of these injuries that it has to be right for me to play, it has to feel comfortable because I don't want to set myself back another five or six weeks just for 20 minutes on the field." Those were soccer phenom David Beckham's words on August 9, 2007 following his ankle injury. Of the approximately 150,000 soccer-related injuries that occur each year, 45% occur in participants under the age of 15. Lower extremity injuries account for up to 81% of all injuries, with ankle injuries accounting for up to 23% of injuries. (Pediatrics 2000)

Inversion sprains (rolling over the outside of the ankle) are one of the most common injuries in soccer. Although these injuries are often considered minor, they can lead to persistent disability in athletes. The injury occurs when the ankle is rolled over the outside causing immediate pain and limited ability to continue playing, or even walking. Often times swelling is immediate, indicating a high likelihood of complete ligament rupture. Bruising may ensue in the following days, usually noted as it appears in the foot and toes.

Initial treatment follows the acronym of P.R.I.C.E. S

Protection	The injured tissues should be protected from further damage.
Rest	Rest from sports is essential, but even walking on a sports injury may cause further damage and should be avoided if it is painful.
Ice	Ice packs can be applied for periods of twenty minutes every couple of hours (never apply ice directly to the skin as it can cause an ice burn). The ice packs relieve pain and are thought to reduce bleeding in the damaged tissue.
Compression	The swelling may be caused by bleeding in the tissues or inflammation of a joint. If this swelling is allowed to consolidate it can produce excessive scar tissue, which can seriously lengthen the rehab period. Compression during the early stages helps to resolve swelling and is essential for a good outcome.
Elevation	If the foot is not elevated the effect of gravity causes the tissue fluid to accumulate around the ankle and foot causing increased pain and limited range of motion.
Support	Support both passively by bracing and actively through rehabilitation and coordination drills.

Early physical therapy treatment can help speed recovery following soft tissue injuries such as David Beckham's ankle sprain. In many studies, functional treatment has shown lower re-injury rates compared with strictly immobilizing the ankle. Functional retraining includes returning to limited activity as early as possible without causing increased pain or swelling. This can include early weight bearing exercises, single-leg stance activities, Theraband™ resisted exercises, Dynadisc™ balance activities, and progression to cutting and pivoting as the ankle heals.

Functional treatment has the goals of hastening return to activity, decreasing re-injury and feelings of ankle instability, and increasing the patient's overall confidence in the use of the injured limb.

If the ankle sprain does not resolve well within 4-6 weeks, or is showing lack of progress toward the above goals, there may be further underlying damage including fractures of the bone or cartilage, bone contusion, or tendon inflammation from stretching or compression during the injury. If suspected, these would need to be evaluated by an orthopedist or sports medicine physician.

Ankle sprains are common in soccer, but can leave the athlete with persistent pain and disability. As David Beckham said, 20-minutes on the field is not worth setting one back 4-6 weeks. As always, respect what your symptoms tell you. If it hurts, don't push through the pain, as this may be further injuring the tissues and making your rehabilitation longer still.