Sports Medicine Corner: Turf toe

A look at the often-misunderstood and painful condition of turf toe

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Turf toe? What in the world is turf toe? University of Wisconsin graduate assistant athletic trainer Ryan Dean answers questions many fans have about common sports injuries in a new series on UWBadgers.com, The Sports Medicine Corner. In part three of the series, Dean examines the differences between strains and sprains.

MADISON, Wis. -- It can be frustrating for any fan when they find out one of their favorite athletes will miss the next game because of an injury. Sometimes the injury may be something self-explanatory like a hamstring or back injury. Other times it may be confusing or poorly described. An example of one of these vague injuries is turf toe.

What exactly is turf toe? Why does an injury affecting a toe lead to so much missed playing time?

What is it? Turf toe is an injury of the foot. It received its name from its association with athletes that participate on harder surfaces such as artificial turf.

Where is it? Turf toe is an injury to the first metatarsalphalangeal joint (a big word that means the joint where the toes and the foot meet), also known as the big toe. The term "turf toe" is actually a blanket term that can include a number of injuries to this joint. These injuries can include an injury to the ligaments surrounding the joint as well as an injury to the surfaces of the bones comprising the joint.

Why is it important? While an injury called turf toe sounds pretty innocent, it can actually be a frustrating problem. Despite only affecting a small area, the big toe is extremely important in a number of athletic maneuvers. The toe supports a large percentage of the body's weight and is used during foot push-off when running and jumping.



Who's at risk? While anyone can suffer from turf toe, athletes involved in running and/or jumping sports are at a higher risk. Athletes that run on harder surfaces such as hardwood, tracks, and artificial turf are also at higher risks because these surfaces have less give than a softer surface such as grass.

How is it injured? The injury typically occurs when the big toe is twisted, hyperextended or even stubbed. When this happens, the ligaments surrounding the joint can be stretched or even torn. Because of this injury, swelling can occur. Between the pain and swelling in the joint, an activity as simple as walking can be difficult and extremely painful.

Then what? The No. 1 treatment for turf toe, as with many injuries, is rest. Resting allows the joint time to heal without reaggravating the injury. While the recovery process continues, some modifications may be made to help support the toe joint. Tape can be applied to keep the toe from hyperextending. Also, a rigid shoe insert may be used to take pressure off of the big toe. In severe cases, surgery may be performed to repair damage to the joint.

How long? As with any injury, it is difficult to establish a set time frame for recovery. There is a long list of variables that can affect how long the athlete is kept out of competition. Turf toe could keep an athlete sidelined anywhere from a few hours to an entire season depending on the severity of the injury.

Rehab? When rehabbing a turf toe injury, the primary goals are to control pain and swelling in the joint. Advanced rehab will focus on increasing the range of motion, flexibility, and strength of the toe. Finally before returning to play, the athlete must exhibit their ability to perform explosive movements (sprinting, jumping, etc.) without pain or weakness.

Who's Had It? In January, recent Notre Dame quarterback and Carolina Panthers draft pick Jimmy Clausen underwent surgery to repair a turf toe injury to his right big toe.

• Links: Turf toe in-depth (eMedicine) | Video: Taping for turf toe (You Tube)

--Ryan Dean UW Sports Medicine