

Turf Toe

Turf toe is a sprain to the ligaments around the big toe that causes stiffness and pain in the big toe joint. Over the course of time, the limited movement can end up causing arthritis in the big toe joint. The decreased movement is also known as hallux limitus or hallux rigidus (the latter being more problematic), but it often occurs as a gradual stiffening long before pain is apparent.

Causes of Turf Toe

Turf toe can be attributed to an abnormal positioning or biomechanics of the foot. When the first metatarsal bone is elevated, such as in that of flat feet, it hinders the movement for the big toe. Abnormal length of the second or first metatarsal bones can also cause the condition. One of the classic examples of an abnormal length for the metatarsal bones is that of Morton's toe. This is another name for a second toe that is a lot longer than that of the big toe. In general, this particular type of foot is more prone to the discomforts of hallux limitus.

The most common cause of turf toe is an impact injury during sports. It is common in American football, and other field sports. Many turf toes will start as sharp and acute pain, and then become chronically painful over a period of weeks or months. The toe pain will often resolve during rest, but come back with sport.

How is Turf Toe Diagnosed?

Your therapist will first assess the toe. This might include asking about your history, your sport, and if you have any other issues with the legs, knees, or ankles. A physical examination may take place and the therapist will palpate around the toe and check the ligaments for signs of ligament damage.

Your therapist will also bend your big toe while lying on your back, or standing. This will give an indication of any stiffness in the toe.

A normal big toe will bend upwards about 65-85 degrees. A turf toe will bend about 30-45 degrees, or under.

Turf Toe Anatomy

The big toe is known as the hallux. The joint that lies at the base part of the big toe is often known as the metatarsophalangeal joint. Just like any other joint within the body, it is covered with articular cartilage, which is a slick, shiny covering that lies on the end part of the bone. If that material becomes injured, it can begin degenerating. The articular surface will end up wearing away until the raw bone is rubbing against the other bone.

Bone spurs will form around the joint in the process, which will end up restricting the motion within the joint, especially when it comes to being able to bend the big toe upward whenever the foot moves.

How to Treat Turf Toe:

1. Rest

Allowing the foot to rest and relax will help to take some of the undue pressure off the affected joint. Avoid heavy weight bearing activities such as long distance running or hiking.

2. Stretching

If you take the time to stretch the big toe joint, you might be able to help alleviate any problems with it tightening up on you.



3. Orthotics

Arch supports that have special modifications can help to take some of the pressure off the big toe. A podiatrist will prescribe these for you.

4. Special Shoes

Rocker soled shoes and stiff-soled shoes will often help to relieve some of the pain and discomfort felt in the big toe. They help to minimize the amount of motion felt in the big toe joint.

5. Therapy

Physical therapy and manual therapy is very successful for mobilizing the stiff big toe joint. Your therapist will stretch the toe increasing the range of movement passively.

6. Surgery

If all of the conservative methods don't prove beneficial, surgery might be the only option to relieve the symptoms. Surgery involves procedures that will help to restore the range of motion in the foot or fuse the joint completely to prevent movement.

Tips:

- Wear sensible shoes that have a good arch support and a firm sole.
- Consult with a podiatrist for a proper evaluation of your condition.
- Change activities to those that prove less stressful for the big toe joint.
- Regular ice or bathing the foot in cold and warm water can help reduce inflammation.
- Work with your physical therapist to improve range of motion of the big toe.