

## TURF TOE



### ■ ■ ■ Description

Turf toe is an injury to the capsule and ligaments of the joint of the base of the big (first) toe. This injury is usually to the bottom of the joint.

### ■ ■ ■ Common Signs and Symptoms

- Pain with motion, especially extending (lifting up) the first toe, including when trying to stand on your tiptoes or push off, such as when running or jumping
- Tenderness on the bottom of the joint at the base of the great toe
- Bruising, redness, swelling, and warmth of the big toe, especially on the bottom of the base of the big toe (occasionally)
- Foot pain, stiffness, and limping

### ■ ■ ■ Causes

Forced or repetitive extension (lifting up) of the big toe, from a rapid or explosive start with running, crouching (football linemen), “stubbing” the big toe, or when another player lands on the back of the athlete’s foot. This results in a sprain or tearing of the capsule or ligaments on the bottom of the joint of the big toe.

### ■ ■ ■ Risk Increases With

- History of previous toe injury
- Long first toe, flat feet, and other big toe bony abnormalities
- Arthritis of the great toe
- Flexible shoes or tight shoes with a narrow toe box
- Family history of foot abnormalities
- Sports requiring sudden, explosive run starts (track), crouching (football linemen), jumping (basketball, volleyball), or playing on synthetic or artificial surfaces

### ■ ■ ■ Preventive Measures

- Wear wide-toed, stiff, well-padded shoes that fit well.
- Tape the big toe to reduce motion.
- Maintain appropriate conditioning:
  - Foot and ankle flexibility
  - Muscle strength and endurance

### ■ ■ ■ Expected Outcome

This condition is usually curable with appropriate treatment, although occasionally surgery is required.

### ■ ■ ■ Possible Complications

- Recurrence of symptoms; increasing symptoms such that the pain may become constant
- Prolonged healing time if not appropriately treated or if not given adequate time to heal
- Inability to compete due to pain

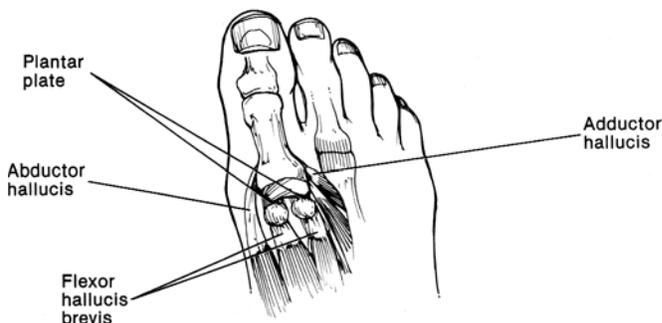
- Injury to other areas of the foot or ankle due to abnormal walking while trying to avoid the pain of toe motion with normal walking
- Hallux rigidus (loss of motion, arthritis, and pain when extending the toe)
- Hallux valgus (bunion)

### ■ ■ ■ General Treatment Considerations

Initial treatment consists of rest from the offending activity and medications and ice to help reduce inflammation and pain. Elevating the injured foot for the first 24 to 48 hours may also help reduce swelling and pain. Contrast baths (cold and heat treatment) and gentle range-of-motion exercises of the big toe are helpful. Wear stiff-soled shoes with a wide toe area to help reduce bending of the big toe. Stiff shoes may, however, affect athletic activity. Taping of the great toe usually is helpful and may allow for earlier return to sports. Rarely, a short trial of casting or bracing the foot and ankle may be attempted. Treatments such as range-of-motion and strengthening exercises and others, by a physical therapist or athletic trainer, may be recommended. A cortisone injection is usually only recommended for chronic symptoms. If the treatments listed here are not successful, surgery may be necessary.

### ■ ■ ■ Medication

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Topical ointments may be of benefit.
- Pain relievers may be prescribed as necessary by your physician. Use only as directed. These are usually only prescribed for postsurgical pain.



**Figure 1**

From DeLee JC, Drez D Jr.: Orthopaedic Sports Medicine: Principles and Practice. Philadelphia, WB Saunders, 1994, p. 1860.

- Injections of corticosteroids may be given to reduce inflammation, although this is not usually recommended for acute injuries.

### ■ ■ ■ Heat and Cold

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used before performing stretching and strengthening activities prescribed by your physician, physical therapist, or athletic trainer. Use a heat pack or a warm soak.

### ■ ■ ■ Notify Our Office If

- Symptoms get worse or do not improve in 2 weeks despite treatment
- After surgery you develop fever, increasing pain, redness, swelling, drainage or bleeding, or increasing warmth
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

## EXERCISES

### > RANGE OF MOTION AND STRETCHING EXERCISES • Turf Toe

These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Flexible tissue is more tolerant of the stresses placed on it during activities.
- Each stretch should be held for 20 to 30 seconds.
- A *gentle* stretching sensation should be felt.



### RANGE OF MOTION • Toe Extension

1. Grip your toe(s) as shown in the drawing.
2. Pull the toe(s) up toward your body as shown. Repeat this exercise by pulling the toe down.
3. Hold this position for \_\_\_\_\_ seconds.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.



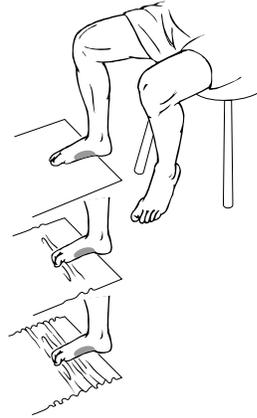
### RANGE OF MOTION • Ankle Plantar Flexion

1. Sit in the position shown.
2. Using your hand, pull your toes and ankle down as shown so that you feel a gentle stretch.
3. Hold this position for \_\_\_\_\_ seconds.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

➤ **STRENGTHENING EXERCISES • Turf Toe**

These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Strong muscles with good endurance tolerate stress better.
- Do the exercises as *initially* prescribed by your physician, physical therapist, or athletic trainer. Progress slowly with each exercise, gradually increasing the number of repetitions and weight used under their guidance.



**STRENGTH • Towel Curls**

1. Sit in a chair and place a towel on a noncarpeted floor. Place your foot/toes on towel as shown. (You may also stand to do this exercise rather than sit.)
2. Curl/pull towel toward you with your toes while keeping your heel on the floor. Move towel with toes only. Do not move your knee or ankle.
3. If this is too easy, place a light weight (book, hand weight, etc.) at the far end of the towel.
4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

Notes:

(Up to 4400 characters only)

Notes and suggestions