PERONEAL TENDINITIS

Description

Peroneal tendinitis is characterized by inflammation and pain of the peroneal tendons (at back of the outer ankle). More often these are partial tears of one or both of the tendons. These structures are the tendon attachments of the muscles of the outer leg to the (1) outer foot and (2) bottom of the inner foot. These structures are important in standing on your toes, in the pushing-off phase of running or jumping, and when turning your foot outward. This injury is uncommon. There may be a grade 1 or 2 strain of the tendon. A *grade 1 strain* is a mild strain. There is a slight pull without obvious tearing (it is microscopic tendon tearing). There is no loss of strength, and the tendon is the correct length. A *grade 2 strain* is a moderate strain. There is tearing of tendon fibers within the substance of the tendon, although it may occur where the tendon meets the muscle or bone. The length of the tendon or the whole muscle-tendon-bone unit is increased, and strength is decreased. A *grade 3 strain* is a complete rupture of the tendon.

Common Signs and Symptoms

- Pain, tenderness, swelling, warmth, or redness over the back of the outer ankle at the peroneal tendons, the outer part of the mid-foot, or the bottom of the arch
- Pain with ankle motion (especially when pushing off or pushing down with the front of the foot) or when standing on the ball of the foot or pushing the foot outward
- Crepitation (a crackling sound) when the tendon is moved or touched

Causes

Peroneal tendinitis is caused by mechanical wear of the tendon in its groove behind the outer ankle, resulting in a degenerative process or overuse of the lower leg muscles. However, it may also occur from strain as a result of a sudden increase in the amount or intensity of activity, a direct injury, or an injury to the lower leg, foot, or ankle. It may also occur after return to activity with incomplete rehabilitation following previous injury to other leg or ankle structures.

Risk Increases With

- Sports that require sudden repetitive pushing off of the foot (jumping and quick starts) or kicking and running sports (especially running down hills and long distances)
- Poor physical conditioning (strength and flexibility)
- Previous injury to the foot, ankle, or leg

Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Allow time for adequate rest and recovery between practices and competition.
- Maintain appropriate conditioning:
  - Ankle and leg flexibility
  - Muscle strength and endurance
- Complete rehabilitation after previous injury.

Expected Outcome

This condition is usually curable within 6 weeks if treated appropriately with conservative treatment and resting of the affected area.

Possible Complications

- Prolonged healing time if not appropriately treated or if not given adequate time to heal
- Recurrence of symptoms if activity is resumed too soon, with overuse, or when using poor technique
- Untreated, tendinitis may result in tendon rupture, requiring surgery

General Treatment Considerations

Initial treatment consists of medication and ice to relieve the pain, stretching and strengthening exercises, and modification of the activity that initially caused the problem. These all can be carried out at home, although referral to a physical therapist or athletic trainer for further evaluation and treatment may be helpful. A cast or walking boot may be recommended to 10 to 14 days to allow the inflammation to settle down by immobilizing the tendon. For less severe cases or before returning to activity, a wedge placed on the outer part of the heel or arch support may be prescribed to reduce stress to the tendon. Surgery to remove the inflamed tendon lining or degenerated tendon tissue (with direct repair or repair to the other peroneal tendon) is occasionally 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.
- Pain relievers may be prescribed as necessary by your physician. Do not take prescription pain medication for longer than 4 to 7 days. Use only as directed and only as much as you need.
- Cortisone injections are almost never indicated. These injections may weaken tendons, so it is better to give the condition more time to heal than to use them.

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 to 4 weeks despite treatment
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

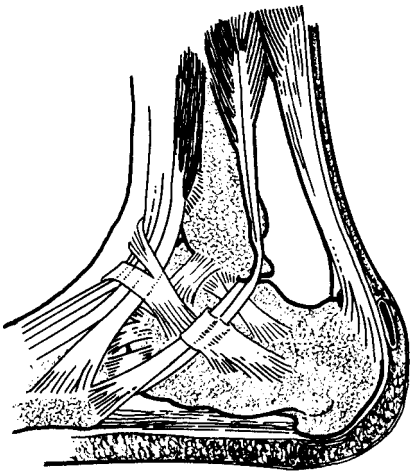


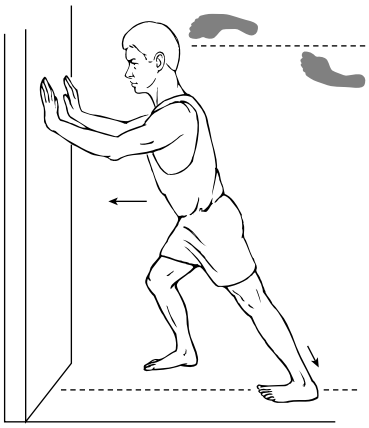
Figure 1
From Nicholas JA, Hershman EB: The Lower Extremity and Spine in Sports Medicine. St. Louis, Mosby Year Book, 1995, p. 444.

EXERCISES

➢ **RANGE OF MOTION AND STRETCHING EXERCISES** · Peroneal Tendinitis

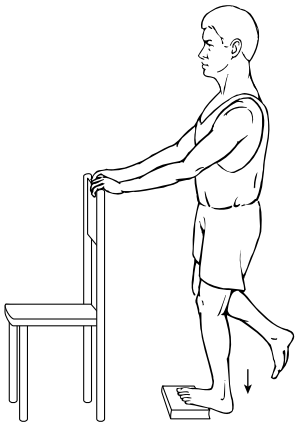
These are some of the ***initial*** exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- 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.



STRETCH · Gastrocsoleus

1. Stand ***one*** arm length from the wall as shown. Place calf muscle to be stretched behind you as shown.
2. Turn the ***toes in*** and ***heel out*** of the leg to be stretched.
3. Lean toward wall leading with your waist, allowing your arms to bend. ***Keep your heel on the floor.***
4. First do this exercise with the knee straight, then bend the knee slightly. Keep your heel on the floor at all times.
5. Hold this position for _____ seconds.
6. Repeat exercise _____ times, _____ times per day.



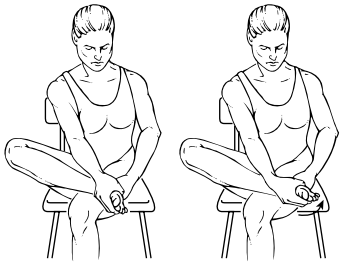
STRETCH · Gastrocsoleus

Note: **This exercise can place a lot of stress on your foot and ankle and should only be done after specifically checking with your physician, physical therapist, or athletic trainer.**

1. Place your toes and the ball of your foot on a book(s) or the edge of a stair. Your heel should be off the ground.
2. Hold on to a chair or stair rail for balance.
3. Allow your body weight to stretch your calf.
4. First do this exercise with the knee straight, then bend the knee slightly.
5. Hold this position for _____ seconds.
6. Repeat exercise _____ times, _____ times per day.

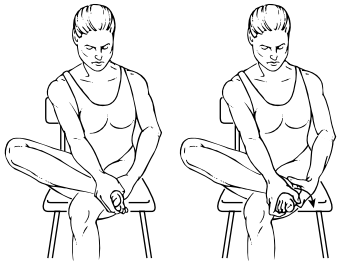
RANGE OF MOTION · Ankle Plantar Flexion

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.



RANGE OF MOTION · Ankle Inversion

1. Sit with your _____ leg crossed over the other.
2. Grip the foot with your hands as shown and turn the sole of your foot upward and in so that you feel a stretch on the outside of the ankle.
3. Hold this position for _____ seconds.
4. Repeat exercise _____ times, _____ times per day.



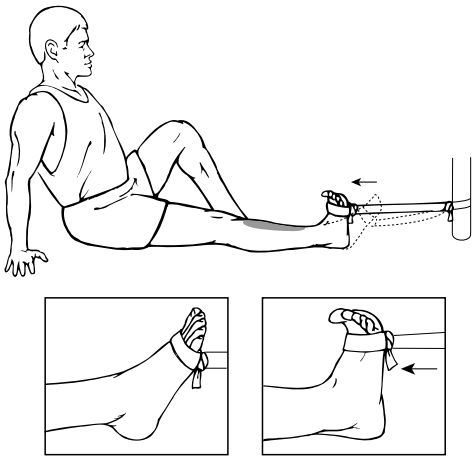
RANGE OF MOTION · Ankle Eversion

1. Sit with your _____ leg crossed over the other.
2. Grip the foot with your hands as shown and turn the sole of your foot upward and out so that you feel a stretch on the inside of the ankle.
3. Hold this position for _____ seconds.
4. Repeat exercise _____ times, _____ times per day.

➢ **STRENGTHENING EXERCISES** • Peroneal Tendinitis

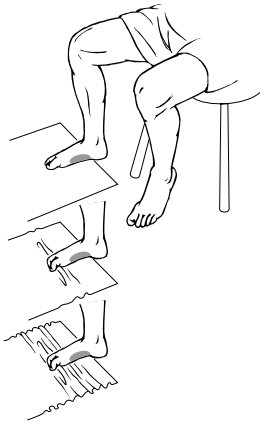
These are some of the ***initial*** exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- 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.



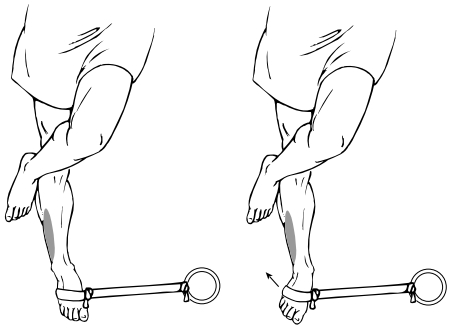
STRENGTH • Dorsiflexors

1. Attach one end of elastic band to fixed object or leg of table/desk. Loop the opposite end around your foot as shown.
2. Slowly pull the foot toward you. Hold this position for _____ seconds. Slowly return to starting position.
3. Repeat exercise _____ times, _____ times per day.



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.



STRENGTH • Ankle Eversion

1. Attach one end of elastic band to fixed object or leg of table/desk. Loop the opposite end around your foot.
2. Turn your toes/foot outward as far as possible, attempting to pull your little toe up and outward. Hold this position for _____ seconds.
3. Slowly return to starting position.
4. Repeat exercise _____ times, _____ times per day.

Notes: (Up to 4400 characters only)

Notes and suggestions