



Peroneal Tendinitis

Exercises:
10 seconds
10 times
1 time per day

DESCRIPTION

Peroneal tendinitis is characterized by inflammation and pain of the peroneal tendons at the back of the outer ankle. More often these are partial tears of one or both tendons, which are the tendon attachments of the muscles of the outer leg to the outer foot and to the 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. Peroneal tendinitis is an uncommon injury, and it may be a grade 1 or 2 strain of the tendon. A *grade 1 strain* is a mild strain, a slight pull without obvious tearing (the tears are microscopic), no loss of strength, and the tendon is the correct length. A *grade 2 strain* is a moderate strain, with 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 midfoot, 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 it may be the result of overuse of the lower leg muscles. 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. Peroneal tendinitis may also occur after return to activity with incomplete rehabilitation following previous injury to other leg or ankle structures.

FACTORS THAT INCREASE RISK

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

PREVENTIVE MEASURES

- Appropriately warm up and stretch before practice and competition.
- Allow time for adequate rest and recovery between practices and competition.
- Maintain appropriate conditioning that includes ankle and leg flexibility and muscle strength and endurance.
- Ensure complete rehabilitation after any foot, ankle, or leg injury before returning to sports.

EXPECTED OUTCOME

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

POSSIBLE COMPLICATIONS

- Healing time may be prolonged if the injury is not appropriately treated, or if it is not given adequate time to heal.
- Symptoms may recur if activity is resumed too soon, with overuse, or when using poor technique.
- Untreated tendinitis may result in tendon rupture that requires surgery.

GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of medication and ice to relieve pain, stretching and strengthening exercises, and modification of the activity that initially caused the problem. These exercises 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 for 10 to 14 days to allow the inflammation to settle down by immobilizing the tendon. For less severe cases, or before returning to activity, an arch support or a wedge placed on the outer part of the heel may be prescribed to reduce stress on 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 antiinflammatory medications, such as aspirin and ibuprofen (do not take for 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed

by your physician, and contact your doctor immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.

- Pain relievers may be prescribed as necessary. Do not take prescription pain medication for longer than 4 to 7 days. Use medications only as directed, and take only as much as you need.
- Cortisone injections are almost never indicated, as they may weaken tendons; 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. It should be applied for 10 to 15 minutes every 2 to 3 hours as needed 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.

WHEN TO CALL YOUR DOCTOR

- 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.

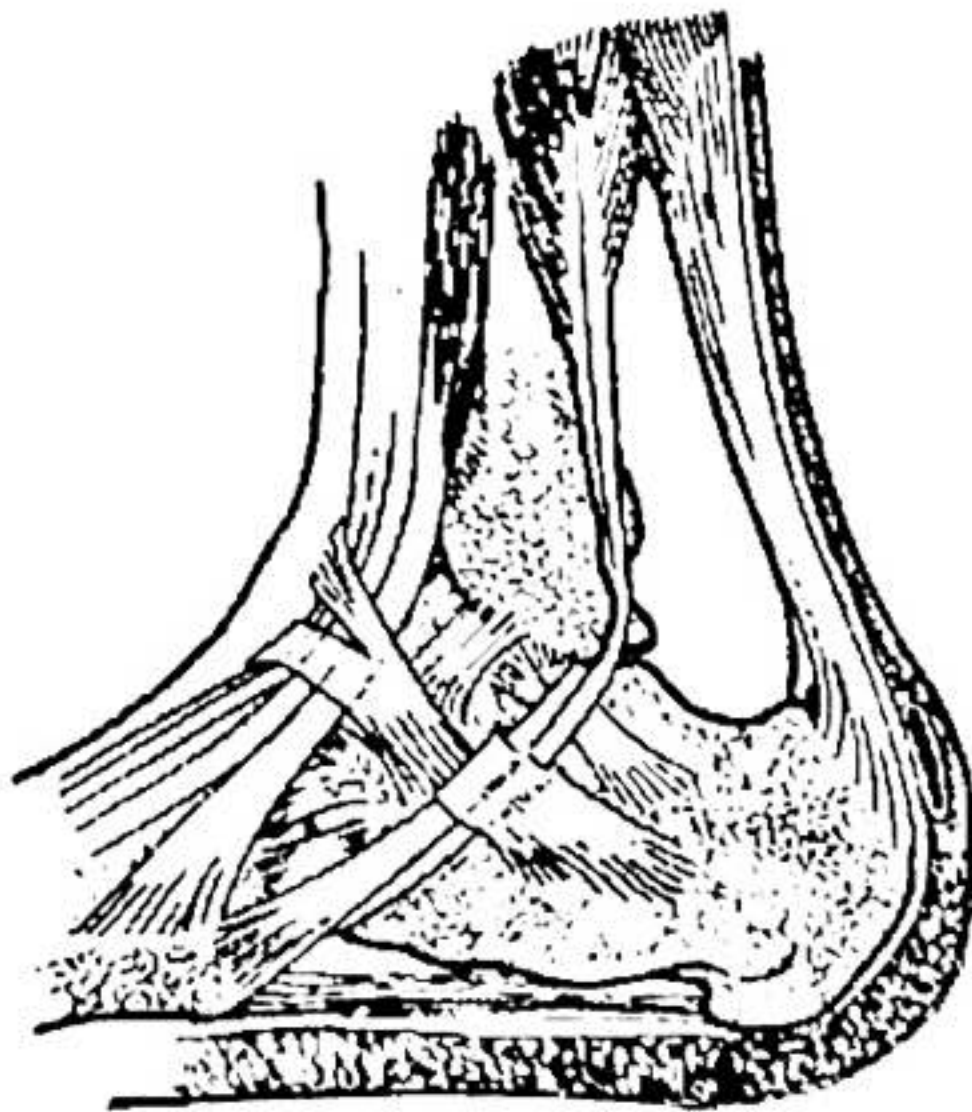


FIGURE 1 From Nicholas JA, Hershman EB: *The lower extremity and spine in sports medicine*, St Louis, 1995, Mosby Year Book, p 444.



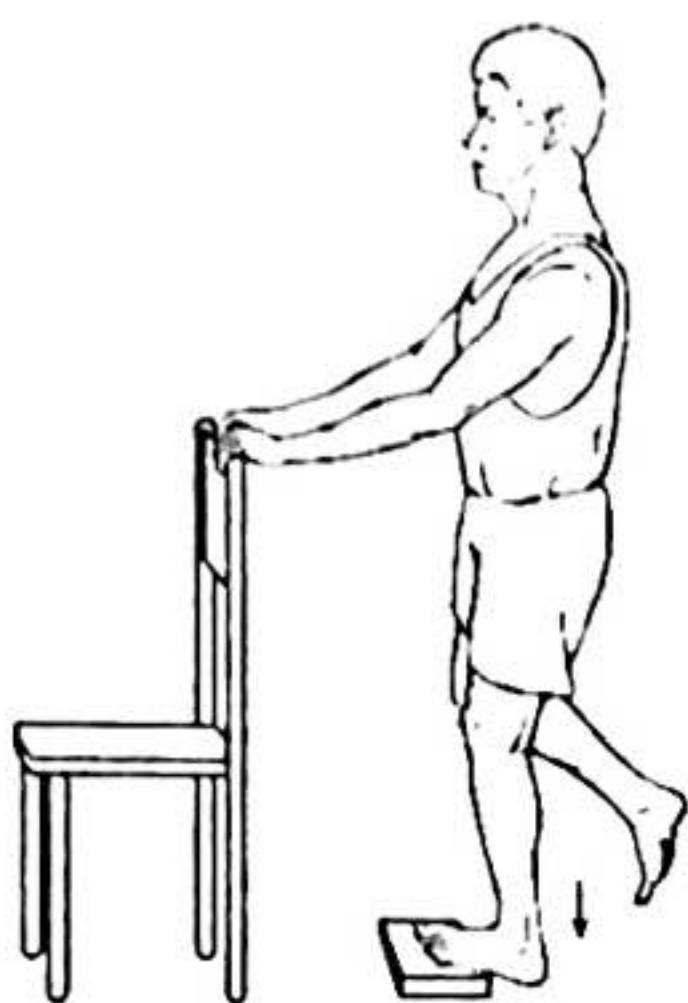
These are some of the *initial* exercises you may use to start your rehabilitation program, until you see your physician, physical therapist, or athletic trainer again, or until your symptoms resolve. Please remember:

- Flexible tissue is more tolerant of the stresses placed on it.
- A *gentle* stretching sensation should be felt.



FLEXIBILITY • Gastrocsoleus Stretch

1. Stand one arm's length from the wall as shown. Position the 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 the wall, leading with your waist and allowing your arms to bend. First do this exercise with your knee straight, then bend it slightly. *Keep your heel on the floor at all times.*
4. Hold this position for ____ seconds.
5. Repeat this exercise ____ times, ____ times per day.



FLEXIBILITY • Gastrocsoleus Stretch

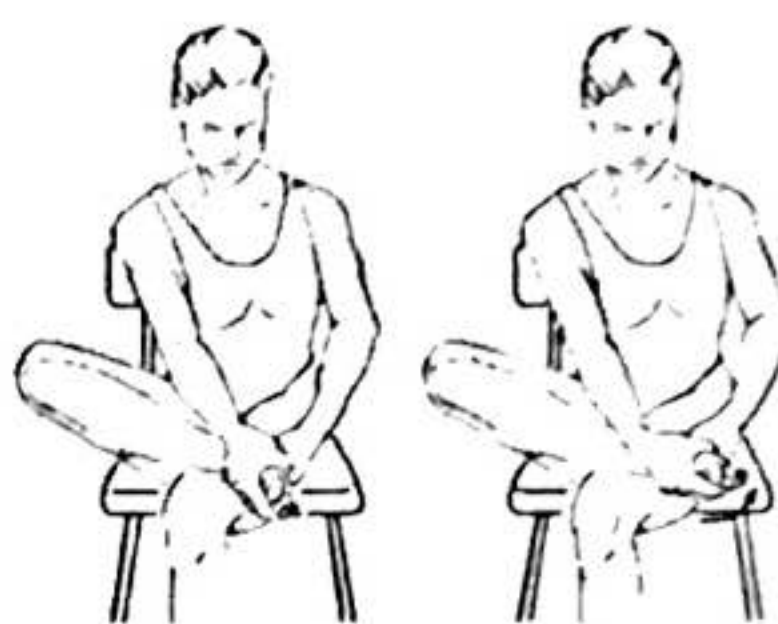
Note: This exercise can place considerable stress on your foot and ankle and should only be done after checking with your physician, physical therapist, or athletic trainer.

1. Place your toes and the ball of your foot on a stack of books or on the edge of a stair. Your heel should be off the ground.
2. Hold on to a chair or stair rail for balance, and allow your body weight to stretch your calf. First do this exercise with your knee straight, then bend it slightly.
3. Hold this position for ____ seconds.
4. Repeat this exercise ____ times, ____ times per day.



RANGE OF MOTION • Ankle Plantarflexion

1. Sit in the position shown in the diagram.
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 this exercise ____ times, ____ times per day.



RANGE OF MOTION • Ankle Inversion

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



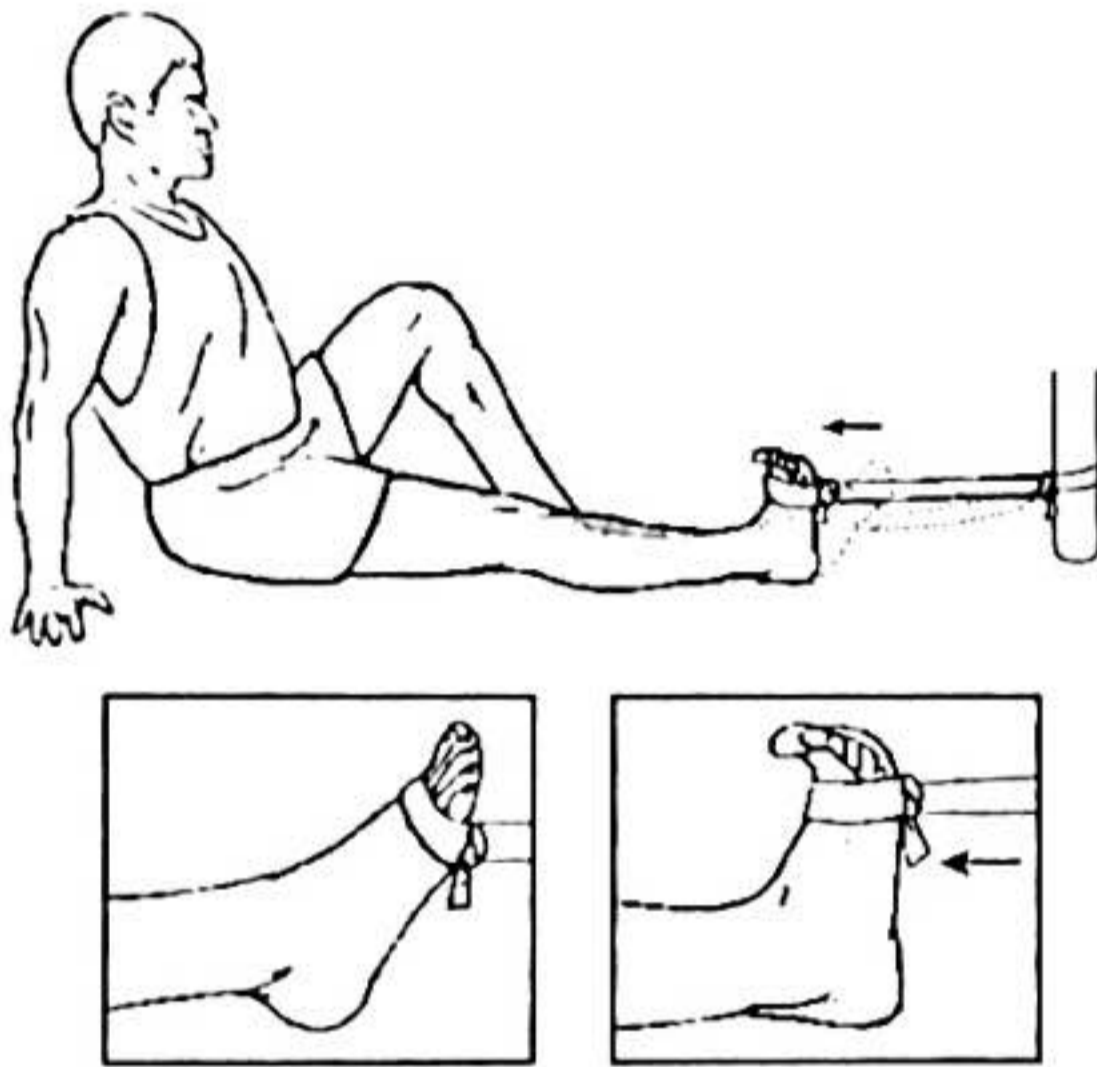
RANGE OF MOTION • Ankle Eversion

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



These are some of the *initial* exercises you may use to start your rehabilitation program, until you see your physician, physical therapist, or athletic trainer again, or until your symptoms resolve. 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 under their guidance, gradually increasing the number of repetitions and weight used.

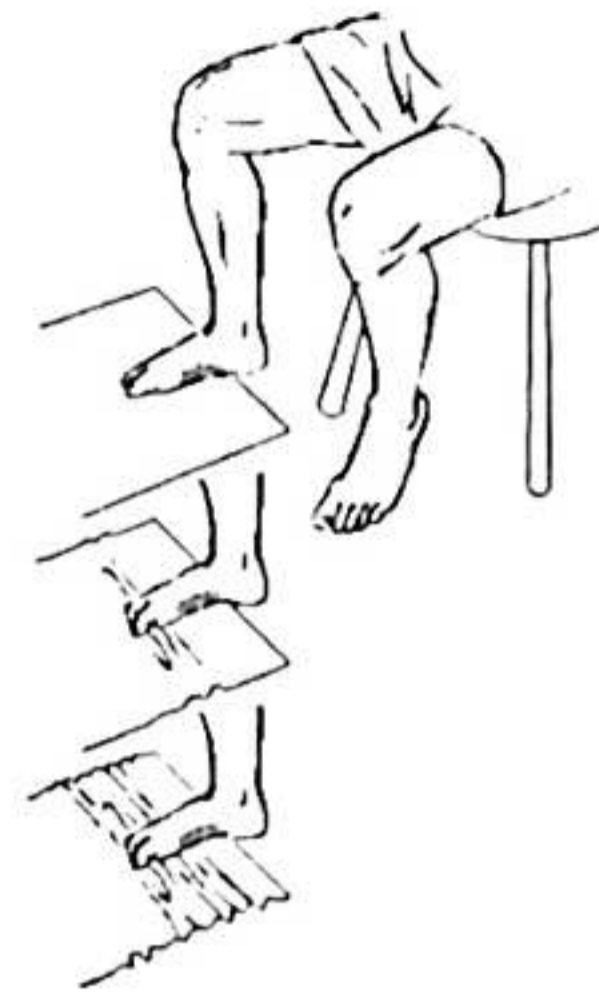


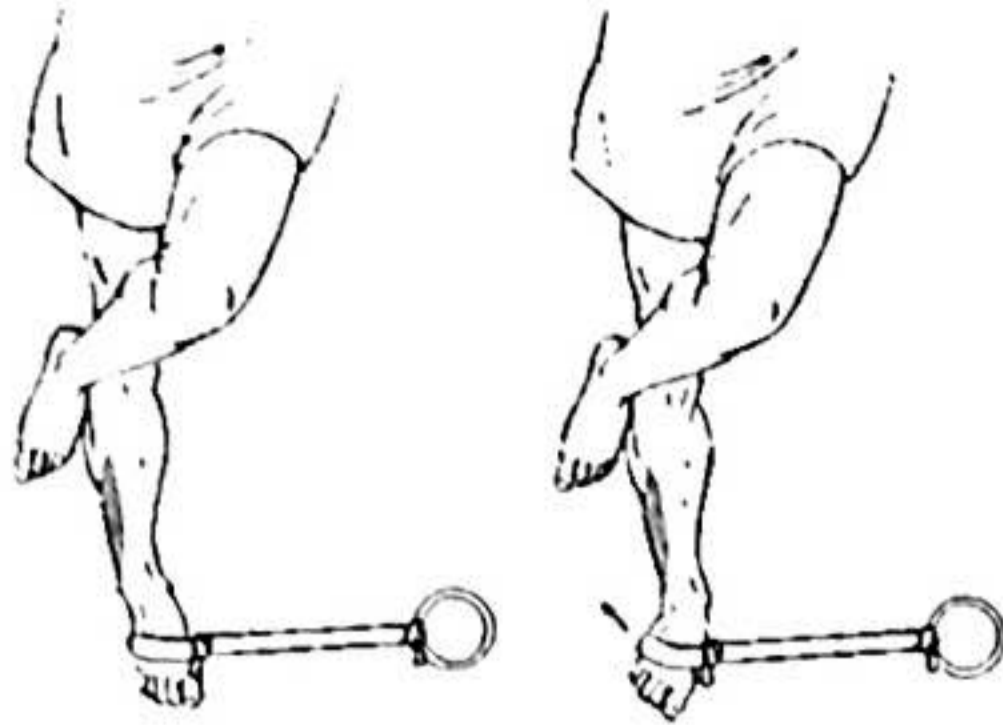
STRENGTH • Towel Curls

1. Sit in a chair on a noncarpeted floor. Place a towel on the floor in front of you, and place your foot on the towel as shown. You may also stand to do this exercise.
2. Pull the towel toward you with your toes, keeping your heel on the floor. Move the towel with your toes only. Do not move your knee or ankle.
3. If this is too easy, place a light weight—a book, hand weight, or canned food—at the far end of the towel.
4. Repeat this exercise ___ times, ___ times per day.

STRENGTH • Dorsiflexion

1. Attach one end of an elastic band to a fixed object, such as the leg of a table or desk. Loop the other end around your foot as shown.
2. *Slowly* pull your foot toward you.
3. Hold this position for ___ seconds, and *slowly* return to the starting position.
4. Repeat this exercise ___ times, ___ times per day.





STRENGTH • Ankle Eversion

1. Attach one end of an elastic band to a fixed object, such as the leg of a table or desk. Loop the other end around your foot.
2. Turn your foot outward as far as possible, attempting to pull your little toe up and out.
3. Hold this position for ____ seconds, and *slowly* return to the starting position.
4. Repeat this exercise ____ times, ____ times per day.