# PERONEAL TENDON INJURIES

A tendon is a band of tissue that connects a muscle to a bone. The two peroneal tendons in the foot run side by side behind the outer ankle bone. One peroneal tendon attaches to the outer part of the midfoot, while the other tendon runs under the foot and attaches near the inside of the arch. The main function of the peroneal tendons is to stabilize the foot and ankle and protect them from sprains.

### Signs & Symptoms

Peroneal tendon injuries may be acute (occurring suddenly) or chronic (developing over a period of time). They most commonly occur in individuals who participate in sports that involve repetitive ankle motion. In addition, people with higher arches are at risk for developing peroneal tendon injuries. Basic types of peroneal tendon injuries are tendonitis, tears, and subluxation.

Tendonitis is an inflammation of one or both tendons. The inflammation is caused by overuse of the tendon or trauma (such as an ankle sprain). Symptoms of tendonitis include:

- Pain
- Swelling
- Warm to the touch

Acute tears are caused by repetitive activity or trauma. As time goes on, these tears may lead to a change in the shape of the foot in which the arch may become higher. Degenerative tears (tendonosis) are usually due to overuse and occur over long periods of time, often years. In degenerative tears, the tendon is like taffy that has been overstretched until it becomes thin and eventually frays. Symptoms of degenerative tears may include:

- Sporadic pain on the outside of the ankle
- Weakness or instability in the ankle
- An increase in the height of the arch

Subluxation means one or both tendons have slipped out of their normal position. In some cases, subluxation is due to a condition in which a person is born with a variation in the shape of the bone or muscle. In other cases, subluxation occurs following trauma. The symptoms of subluxation may include:

- A snapping feeling of the tendon around the ankle bone
- Sporadic pain behind the outside ankle bone
- Ankle instability or weakness



#### **Diagnosis**

The surgeon will examine the foot and look for pain, instability, swelling, warmth and weakness on the outer side of the ankle. In addition, an x-ray or other advanced imaging studies may be needed to fully evaluate the injury.

#### **Nonsurgical Treatment**

Treatment depends on the type of peroneal tendon injury. Options include:

- Immobilization. A cast or splint may be used to keep the foot and ankle from moving and allow the injury to heal.
- Medications. Oral or injected anti-inflammatory drugs may help relieve pain and inflammation.
- Physical therapy. Ice, heat, or ultrasound therapy may be used to reduce swelling and pain. As symptoms improve, exercises can be added to strengthen the muscles and improve range of motion and balance.
- Bracing. The surgeon may provide a brace to use for a short while or during activities requiring repetitive ankle motion. Bracing may also be an option when a patient is not a candidate for surgery.

## When Is Surgery Needed?

In some cases, surgery may be needed to repair the tendon or tendons and perhaps the supporting structures of the foot. The foot and ankle surgeon will determine the most appropriate procedure for the patient's condition and lifestyle. After surgery, physical therapy is an important part of rehabilitation.

