

A GUIDE TO LATERAL ANKLE INSTABILITY

OVERVIEW

The ankle is the most commonly injured joint in sports. Ankle sprains represent about 85% of all ankle injuries in the US. While an inversion ankle injury often involves injury to the lateral collateral ankle ligaments (Figure 1), other structures in this area may also be injured. These associated injuries may not be evident until weeks or months after the initial event, and may not present themselves until the patient attempts to return to full activity but is unable to because of persistent pain. Typical associated injuries include chronic lateral ankle instability, peroneal tendon damage, nerve injury, syndesmotic sprain or tear, and intraarticular cartilage damage. Although the injury may initially seem minor, a thorough evaluation and aggressive, conservative therapy is important in improving the outcome.

APPEARANCE

Chronic ankle instability is characterized by a recurring "giving way" of the lateral side of the ankle. This condition often develops after repeated sprains. Usually the "giving way" occurs while walking or doing other activities, but it may also occur when the patient is standing. Once the ligaments are injured to the point they can no longer maintain joint stability it is very easy for the ankle to undergo repetitive pathological inversion. This motion may lead to continued damage of the ankle joint structures as well as pain, swelling, and arthritic changes. Many athletes suffer from chronic ankle instability.

SYMPTOMS

- Patients often complain that the affected ankle feels "unstable" or "gives out" frequently.
- Patients typically feel unsteady when walking on uneven ground or sloped surfaces.
- Repeated inversion injuries will occur with the slightest provocation.
- Patients commonly report twisting or spraining ankles every few months with varying levels of severity.
- Persistent swelling to the anterolateral aspect of the ankle
- Bracing or taping may not provide adequate stability.

DIAGNOSIS

There may be tenderness to palpation of the anterior talofibular ligament or calcaneofibular ligament. Typically, one will see a positive anterior drawer sign (Figure 2) similar to what you would see with an acute ankle injury. There is also increased inversion of the talus in the ankle mortise, particularly when compared to the contralateral ankle. When there is attempted rotary motion of the ankle within the mortise, the talus will often translocate laterally.

- X-rays are used to evaluate for fractures; stress views may be used to look for instability; and osteochondral lesions may be visualized.
- Diagnostic ultrasound may be utilized to statically and dynamically evaluate the ankle ligaments and tendons.
- MRI may be ordered if additional pathology is suspected.

TREATMENT

Initial treatment involves managing symptoms and biomechanical control. Non-steroidal anti-inflammatories or steroid injections, if used alone usually do not provide long term relief.

- Changes in shoe gear
- Functional orthotics are a vital part of treatment, especially when biomechanical abnormalities are present.
- Taping and bracing, particularly during athletic activity
- Physical therapy

If conservative treatment fails to provide relief or the ankle is too unstable to be controlled with bracing and orthotics, surgical treatment is warranted. Surgical correction is based upon the presenting condition and varies from simple repair of ruptured ligaments to complex reconstruction of ligaments with tendon grafts and osteochondral repair of a damaged articular surface.



Figure 1: Diagram of Lateral Ankle Ligaments



Figure 2: The anterior drawer test is used to assess the amount of anterior displacement of the talus relative to the tibia. This should also be performed on the contralateral side for comparison.



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Chicago Podiatric Surgeons is dedicated to providing the best possible podiatric care for your patients. This care includes answering patient questions and ensuring they understand their treatment options. Of course, the understanding of treatment options starts with you, the primary care physician. We hope that you find this overview of common podiatric disorders to be helpful in the care of your patients, and that you look forward to receiving future topics from us.