

ANKLE PAIN

Anatomy

Conditions: Ligamentous Injury • Tendonitis • Plantar Fasciitis

Procedures: Epidural • Nonprocedural Treatments

Surgery



ANATOMY

The ankle is a complex mechanism. What we normally think of as the ankle is actually made up of two joints: the **subtalar joint**, and the **true ankle joint**.

The true ankle joint is composed of 3 bones, seen above from a front, or anterior, view: the **tibia** which forms the inside, or medial, portion of the ankle; the **fibula** which forms the lateral, or outside portion of the ankle; and the **talus** underneath. The true ankle joint is responsible for **up and down** motion of the foot.

Beneath the true ankle joint is the second part of the ankle, the subtalar joint, which consists of the **talus** on top and **calcaneus** on the bottom. The subtalar joint allows **side to side** motion of the foot. The ends of the bones in these joints are covered by **articular cartilage**. The major ligaments of the ankle are: the **anterior tibiofibular ligament**, which connects the tibia to the fibula; The **lateral collateral ligaments**, which attach the fibula to the calcaneus and gives the ankle lateral stability; and, on the medial side of the ankle, the **deltoid ligaments**, which connect the tibia to the talus and calcaneus and provide medial stability.

These components of your ankle, along with the muscles and tendons of your lower leg, work together to handle the stress your ankle receives as you walk, run and jump.



CONDITIONS

Ligamentous Injury

There are numerous ligaments in the foot which can be sprained. Usually these respond to conservative methods and THERAPY. A thorough description of these injuries is impossible here, but an accurate diagnosis is necessary and should include a history and physical examination by a qualified physician. Diagnostic imaging with x-ray or MRI may be necessary to further clarify the injury.

Tendonitis

Inflammation can occur at the level of the tendon of the many muscles in the ankle and foot. Usually these respond to conservative methods and THERAPY. A thorough description of these injuries is impossible here, but we accurate diagnosis is necessary and should include a history and physical examination by a qualified physician. Diagnostic imaging with x-ray or MRI may be necessary to further clarify the injury.

Plantar Fasciitis



Inflammation of the tough fibrous band on the bottom of the foot can result in severe pain. Oftentimes this pain is worst with the first step out of bed in the beginning of the day. Usually this condition responds to conservative methods and THERAPY.



PROCEDURES

Nonprocedural Treatments

PHYSICAL AND OCCUPATIONAL THERAPY

This type of therapy may consist of exercises to improve range of motion, strength and conditioning. A good therapist will examine you, assess your deficits and disease and formulate a plan based on optimizing function and minimizing pain. These exercises are specific for the nature of your injury and should be executed under the supervision of a physician who understands your case.

MODALITIES

Modalities include simple age-old treatments such as heat, cold and massage as well as newer treatment methods such as acupuncture, manipulation, and electrical stimulation. Your physician and therapists should formulate an optimal treatment protocol to maximize your healing potential. These modalities are often used in conjunction with Physical and Occupational therapy.

MEDICATIONS

Depending on the nature of your problem, Non-steroidal antiinflammatory drugs ['NSAIDS'], corticosteroids, and opioids [narcotic] medications may be used. If there is a muscular spasm, a muscle-relaxant may help alleviate that aspect of your pain. Narcotics should be minimized and used only for short periods if at all possible due to rapid tolerance and all the attendant risks associated with abuse of a controlled substance.

ORTHOTICS

An appropriate brace sometimes is necessary to stabilize the knee. The right brace for the right condition is essential, and this subject is too detailed for discussion here. Proper fit is also necessary to insure stability.



SURGERY

Dr. Sandhu performs minimally invasive surgeries which result in a rapid recovery and minimal risk to the patient. Although we do not perform large-scale open surgeries in our clinics, there are occasions where a problem requires surgical intervention.

We can help screen potential surgical candidates and send them for evaluation by the appropriate specialist. These surgeons are usually orthopedic surgeons or neurosurgeons with specialized training for the particular disease process involved.