Osteoarthritis of the Foot and Ankle

Osteoarthritis is a condition characterized by the breakdown and eventual loss of cartilage in one or more joints. Cartilage—the connective tissue found at the end of the bones in the joints—protects and cushions the bones during movement. When cartilage deteriorates or is lost, symptoms develop that can restrict one’s ability to easily perform daily activities. Osteoarthritis is also known as degenerative arthritis, reflecting its nature to develop as part of the aging process. As the most common form of arthritis, osteoarthritis affects millions of Americans. Many people refer to osteoarthritis simply as arthritis, even though there are more than 100 different types of arthritis.

Osteoarthritis appears at various joints throughout the body, including the hands, feet, spine, hips, and knees. In the foot, the disease most frequently occurs in the big toe, although it is also often found in the midfoot and ankle.

Causes. Osteoarthritis is considered a “wear and tear” disease because the cartilage in the joint wears down with repeated stress and use over time. As the cartilage deteriorates and gets thinner, the bones lose their protective covering and eventually may rub together, causing pain and inflammation of the joint. An injury may also lead to osteoarthritis, although it may take months or years after the injury for the condition to develop. For example, osteoarthritis in the big toe is often caused by kicking or jamming the toe, or by dropping something on the toe. Osteoarthritis in the midfoot is also often caused by dropping something on it, or by a sprain or fracture. In the ankle, osteoarthritis is usually caused by a fracture and occasionally by a severe sprain. Sometimes osteoarthritis develops as a result of abnormal foot mechanics. People who have flat feet or high arches are at increased risk for developing osteoarthritis in the foot. A flat foot causes less stability in the ligaments (bands of tissue that connect bones), resulting in excessive strain on the joints, which can cause arthritis. A high arch is rigid and lacks mobility, causing a jamming of joints that creates an increased risk of arthritis.
Treatment: Non-Surgical Options

**Oral medications.** Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, are often helpful in reducing the inflammation and pain. Occasionally a prescription for a steroid medication is needed to adequately reduce symptoms. In addition, certain nutritional supplements may provide some longer-term benefit.

**Orthotic devices.** Custom orthotic devices (shoe inserts) are often prescribed to provide needed support to improve the foot's mechanics or cushioning that may help minimize pain.

**Bracing.** Bracing, which restricts motion and supports the joint, can reduce pain during walking and help prevent further deformity.

**Immobilization.** Protecting the foot from movement by wearing a cast or removable cast-boot may be necessary to allow the inflammation to resolve.

**Steroid injections.** In some cases, steroid injections are applied to the affected joint to deliver anti-inflammatory medication.

**Physical therapy.** Exercises to strengthen the muscles, especially when the osteoarthritis occurs in the ankle, may give the patient greater stability and help avoid injury that might worsen the condition.

**When is Surgery Needed?** If non-surgical treatment fails to adequately reduce the pain associated with osteoarthritis, surgery may be recommended. The goal of surgery is to decrease pain and improve function. Our doctors will consider a number of factors when selecting the procedure best suited your condition and lifestyle.