### Osteoarthritis of the Foot and Ankle

### What Is Osteoarthritis?

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.

Arthritis of the foot and ankle can affect any joint but most commonly affects the 1<sup>st</sup> toe joint, the middle of the foot or the 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.

Sometimes osteoarthritis develops as a result of a foot deformity such as flat feet or high arches.

## **Symptoms**

People with osteoarthritis in the foot or ankle experience, in varying degrees, one or more of the following:

- Pain and stiffness in the joint
- Swelling in or near the joint
- Difficulty walking or bending the joint

Some patients with osteoarthritis also develop a bone spur (medically called an osteophyte) at the affected joint. Shoe pressure may cause pain at the site of a bone spur, and in some cases, blisters or calluses may form over its surface. Bone spurs can also limit the movement of the joint.

# **Diagnosis**

In diagnosing osteoarthritis, the doctor needs to examine the foot thoroughly, looking for swelling in the joint, limited mobility and pain with movement. In some cases, deformity and/or enlargement (spurs) of the joint may be noted. X-rays may be ordered to evaluate the extent of the disease.

#### Treatment:

Arthritis is a progressive disease and once there is joint damage, it can't be reversed. Treatments are aimed to slow the progression of the deformity but can't restore the joint back to its original form.

- Oral medications. Non-steroidal anti-inflammatory drugs (NSAIDs), such as diclofenac or celecoxib are often helpful in reducing the inflammation and pain.
- Orthotic devices. Custom orthotic devices (shoe inserts) are often prescribed to provide support to improve the foot's mechanics or cushioning to help minimize pain.
- **Bracing.** Bracing, which restricts motion and supports the joint, can reduce pain during walking and can 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
  osteoarthritis occurs in the ankle, may give the patient greater stability and
  may help him or her avoid injury that might worsen the condition.
- **Surgery:** When osteoarthritis has progressed substantially or has failed to improve with nonsurgical treatment, surgery may be recommended. In advanced cases, surgery may be the only option. There a number of surgical procedures for arthritis, from joint debridements to joint replacements. This will depend on the degree of arthritis in the joint.

### References:

www.foothealthfacts.org

www.aofas.org

Pictures: Google images