Arthritis is a process which results in damage to the normally smooth articulating surfaces of a joint, resulting in pain, stiffness and often swelling. Arthritis damages the highly specialized cartilage which lines the end of bones allowing smooth joint movement.

The arthritis process can cause inflammation of the joint and over time can sometimes lead to deformity. There are various different types of arthritis, some occurring in a single joint as a result of previous injury and others occur in more than one joint as a result of various inflammatory problems. Arthritis can occur in any of the joints of the foot and ankle but is most common in the big toe joint, midfoot, and ankle.

Arthritis in the Foot & Ankle

Symptoms of Arthritis in the Foot & Ankle

Arthritis can occur in a joint without any noticeable symptoms. However, as it progresses, patients often report symptoms of stiffness, pain, swelling, and later on, deformity can occur. Some patients will develop a bony prominence called an osteophyte (“bone spur”). This can cause pinching of the lining of the joint (synovium) which is called impingement. Gradually, these symptoms can limit activity and when more advanced, patients can begin to report symptoms even when resting or in bed at night.

The causes of Arthritis in the Foot & Ankle

Commonly, arthritis in the foot and ankle may follow an injury to a joint (especially in the ankle joint and the big toe joint). This is called “post-traumatic” arthritis. In the ankle for example, this may follow a fracture or longstanding instability/multiple sprains. Primary osteoarthritis (arthritis without history of injury) is less common in the ankle than it is in the hip or the knee and we do not yet know the reason for this.

The foot and ankle can also be affected by inflammatory arthritis such as rheumatoid arthritis or sero-negative arthritis. Gout can also affect the joints of the foot and ankle (although most commonly seen in the big toe joint).

The diagnosis of arthritis and its cause is made after careful assessment by an orthopaedic surgeon and is confirmed with weight-bearing X-rays or sometimes other imaging such as MRI can be helpful.

Treatment of Arthritis in the Foot & Ankle

Treatment such as footwear modification, anti-inflammatory medication and physiotherapy can be very effective. Sometimes injections (cortisone) can help to damp down inflammation. If these treatments are insufficient then surgery may be necessary and can be very successful.

Surgery in the earlier stages of arthritis may be “keyhole” (arthroscopy). This allows the surgeon to assess and treat the joint from the inside using a minimally invasive approach. The joint can be tidied up if the arthritic process is not too advanced but is not a cure for the condition. (see ankle arthroscopy information)

In more advanced arthritis the surgeon may recommend that the joint is fused or replaced. Fusing the joint effectively removes the painful joint surfaces and joins the two surfaces of the bone together (permanently stiffening the joint). Sometimes this can also be performed by keyhole surgery. Replacing the joint may also be an option in advanced arthritis and this involves replacing the painful worn joint surfaces with artificial joint bearings made of highly specialised metals and/or polyethylene. (see specific information sheets for joint fusion and joint replacement).