

Rheumatoid Arthritis in the Foot and Ankle

What Is Rheumatoid Arthritis?

Rheumatoid arthritis (RA) is a disease in which certain cells of the immune system malfunction and attack healthy joints.

RA causes inflammation in the lining (synovium) of joints, most often the joints of the hands and feet. The signs of inflammation can include pain, swelling, redness and a feeling of warmth around affected joints. In some patients, chronic inflammation results in damage to the cartilage and bones in the joint. Serious damage can lead to permanent joint destruction, deformity and disability.

When joints become inflamed due to RA, the synovium thickens and produces an excess of joint fluid. This overabundance of fluid, along with inflammatory chemicals released by the immune system, causes swelling and damage to the joint's cartilage and bones.

Symptoms Affecting the Foot & Ankle

Foot problems caused by RA commonly occur in the forefoot (the ball of the foot, near the toes), although RA can also affect other areas of the foot and ankle. The most common signs and symptoms of RA-related foot problems, in addition to the abnormal appearance of deformities, are pain, swelling, joint stiffness and difficulty walking.

Deformities and conditions associated with RA may include:

- Rheumatoid nodules (lumps), which cause pain when they rub against shoes or, if they appear on the bottom of the foot, pain when walking
- Dislocated toe joints
- Hammertoes
- Bunions
- Heel pain
- Achilles tendon pain
- Flatfoot ankle pain

Diagnosis

RA is diagnosed on the basis of a clinical examination as well as blood tests.

To further evaluate the patient's foot and ankle problems, the surgeon may order x-rays and/or other imaging tests.

Treatment by the Foot & Ankle Surgeon

While treatment of RA focuses on the medication prescribed by a patient's primary doctor or rheumatologist, the foot and ankle surgeon will develop a treatment plan aimed at relieving the pain of RA-related foot problems. The plan may include one or more of the following options:

- **Orthotic devices.** The surgeon often fits the patient with custom orthotic devices to provide cushioning for rheumatoid nodules, minimize pain when walking and give needed support to improve the foot's mechanics.
- **Accommodative shoes.** These are used to relieve pressure and pain and to assist with walking.
- **Aspiration of fluid.** When inflammation flares up in a joint, the surgeon may aspirate (draw out) fluid to reduce the swelling and pain.
- **Steroid injections.** Injections of anti-inflammatory medication may be applied directly to an inflamed joint or to a rheumatoid nodule.

When Is Surgery Needed?

When RA produces pain and deformity in the foot that is not relieved through other treatments, surgery may be required. The foot and ankle surgeon will select the procedure best suited to the patient's condition and lifestyle.