# Rheumatoid Arthritis of the Foot and Ankle

Milton J. Stern, DPM

# What It Is, Causes, Symptoms, and Treatment

#### What Is Rheumatoid Arthritis of the Foot and Ankle?

Rheumatoid arthritis (RA) is a chronic autoimmune disease that causes inflammation in the joints, including those in the foot and ankle. Over time, RA can lead to joint damage, pain, and reduced mobility. Understanding rheumatoid arthritis of the foot and ankle is essential for early diagnosis and effective management.

Rheumatoid arthritis occurs when the immune system mistakenly attacks the synovium (the lining of the joints), leading to inflammation and damage. In the foot and ankle, this can affect multiple joints, including the toes, midfoot, hindfoot, and ankle. RA in these areas can significantly impact walking, standing, and daily activities.



#### **Causes of Rheumatoid Arthritis**

The exact cause of RA is unknown, but several factors may contribute to its development:

### 1. Genetic Predisposition:

- o A family history of RA or other autoimmune diseases increases the risk.
- 2. Immune System Dysfunction:
  - o RA is an autoimmune disorder where the immune system attacks healthy joint tissue.
- 3. Environmental Factors:
  - o Smoking, exposure to certain infections, and other environmental triggers may increase susceptibility.
- 4. Hormonal Factors:
  - o RA is more common in women, suggesting a potential link to hormonal changes.

# Symptoms of Rheumatoid Arthritis in the Foot and Ankle

The symptoms of RA in the foot and ankle can vary in severity and may include:

## 1. Pain and Swelling:

 Persistent pain and swelling in the affected joints, often worse in the morning or after periods of inactivity.

#### 2. Stiffness:

o Difficulty moving the foot and ankle due to joint stiffness.

#### 3. Deformities:

Over time, joint damage can lead to deformities such as hammertoes, bunions, or a collapsed arch.

#### 4. Warmth and Redness:

o Inflamed joints may feel warm and appear red.

## 5. Reduced Mobility:

- o Difficulty walking or bearing weight on the affected foot or ankle.
- 6. Systemic Symptoms:



• Fatigue, fever, and a general feeling of unwellness often accompany RA.

# **Diagnosis of Rheumatoid Arthritis**

Diagnosing RA involves a combination of clinical evaluation, imaging studies, and laboratory tests:

#### 1. Medical History and Physical Exam:

o Assessing joint pain, swelling, and stiffness.

#### 2. Imaging Studies:

- o X-rays: Detect joint damage and deformities.
- o **MRI or Ultrasound**: Identify early inflammation and soft tissue involvement.

#### 3. Blood Tests:

- o Rheumatoid Factor (RF): An antibody often present in RA.
- o Anti-CCP Antibodies: More specific markers for RA.
- o **Inflammatory Markers**: Elevated ESR (erythrocyte sedimentation rate) and CRP (C-reactive protein).



#### Treatments for Rheumatoid Arthritis in the Foot and Ankle

Treatment aims to manage symptoms, reduce inflammation, and prevent joint damage. Options include:

#### 1. Medications:

- Disease-Modifying Antirheumatic Drugs (DMARDs):
  - Medications like methotrexate slow disease progression reduce inflammation.
- Biologic Agents:
  - Targeted therapies, such as TNF inhibitors, block specific immune system pathways involved in RA.
- Nonsteroidal Anti-Inflammatory Drugs (NSAIDs):
  - o Provide pain relief and reduce inflammation.
- Corticosteroids:
  - o Fast-acting anti-inflammatory drugs used for flare-ups.

and

# 2. Physical Therapy:

• Exercises to improve flexibility, strength, and joint function.

#### 3. Orthotic Devices:

• Custom shoe inserts, braces, or specialized footwear to reduce pressure on affected joints and improve comfort.

#### 4. Lifestyle Changes:

- Weight Management: Reducing body weight can alleviate stress on the foot and ankle joints.
- Low-Impact Exercise: Activities like swimming or cycling maintain mobility without putting excessive strain on the joints.

#### 5. Surgical Options:

- Surgery may be necessary for severe cases to repair or replace damaged joints. Options include:
  - o Joint Fusion (Arthrodesis): Fusing bones to stabilize the joint.
  - o Joint Replacement (Arthroplasty): Replacing damaged joints with artificial implants.
  - o **Soft Tissue Repair**: Correcting deformities or relieving tension in tendons.

# **Preventing Joint Damage in Rheumatoid Arthritis**

While RA cannot be completely prevented, early intervention and management can minimize joint damage and improve quality of life:

- 1. Early Diagnosis:
  - o Seek medical attention for persistent joint pain or swelling.
- 2. Adherence to Treatment:
  - o Follow prescribed medication and therapy regimens to control disease activity.
- 3. Foot Care:
  - o Inspect feet regularly for signs of deformities or pressure points.
- 4. Protect Joints:
  - o Use assistive devices, if needed, to reduce strain on joints.

# Conclusion

Rheumatoid arthritis of the foot and ankle can significantly impact mobility and quality of life if left untreated. Early diagnosis and a comprehensive treatment plan can help manage symptoms, prevent joint damage, and maintain an active lifestyle. If you experience symptoms of RA in your feet or ankles, consult a healthcare provider for evaluation and personalized care.