

# Ankle Arthritis

## What is Ankle Arthritis

- Loss of smooth cartilage in the ankle joint leading to pain, swelling, and stiffness
- Commonly associated with a significant previous ankle injury (ex. ankle fracture)
- Less common causes include: lower leg malalignment, foot deformities, rheumatoid arthritis, inflammatory arthritis, gout, or a joint infection
- More common as people age, but age itself does not cause ankle arthritis
- Less common than hip or knee arthritis despite the ankle joint being smaller and subject to greater loading forces



**Figure 1: Ankle Arthritis**

## Symptoms of Ankle Arthritis

- Most common symptoms are ankle joint pain, swelling, and stiffness.
- “Startup pain” is common: pain after getting up following sitting for a while
- A history of a previous major ankle injury is common
- Symptoms usually worsen gradually, but in some patients, progression is rapid

## Physical Findings of Ankle Arthritis

- Ankle is often swollen and may have generalized discomfort
- Pain often more pronounced towards the front of the ankle
- A limp is usually present
- Ankle motion will be restricted compared to the unaffected ankle

## Imaging Studies

- Weight-bearing x-rays of the ankle will often demonstrate:
  - Loss of ankle joint space (due to the loss of cartilage)
  - Bone spurring
  - Extra density of the bone around the ankle joint.
- An MRI or CT scan is usually not required to establish the diagnosis or carry out conservative treatment --although a CT scan or MRI may be ordered if the source of discomfort is unclear --or if surgery is planned.

## Treatment of Ankle Arthritis

Non-operative (conservative) treatment of ankle arthritis involves:

- 1. Decreasing the load through the ankle joint**
  - *Activity modification*
    - Look for ways to limit standing and walking
    - Perform exercises with less loading (ex. cycling instead of running)
  - *Soft Orthotics* -provides a spongy foot bed to absorb load
  - *Weight loss* -losing 5-10 pounds will decrease ankle forces 15-30 pounds
- 2. Limiting ankle joint motion**
  - *Ankle Bracing* -helps limit ankle motion and support the joint
  - *Comfort shoes* -gently curved stiff sole that is well fitted
- 3. Decreasing the pain response**
  - *Anti-inflammatory medications* -May provide short-term pain relief
  - *Acetaminophen* -Can help to lessen pain
  - *Corticosteroid injections* -can decrease ankle inflammation and pain
  - *Platelet Rich Plasma (PRP) injections*

Surgery: Patients with severe ankle arthritis may benefit from surgery. Options include:

- Ankle Fusion: Converting a stiff painful ankle to a stiff painless ankle
- Ankle Replacement: Replacing the arthritis ankle with an artificial ankle