

## Radiology Checklist for Plain Films of the Ankle

Imaging Findings	Cause
<b>Bone Abnormalities</b>	
Discontinuous cortex and displaced bone fragment on XR, CT, and MR; abnormal marrow signal on MR.	Distal tibia, fibula, or combined tibia and fibular fracture with or without ankle dislocation; talus fracture
Focal periosteal reaction or lucency on XR, CT, and MR; abnormal marrow SI on MR.	Stress fracture
Bilateral periostitis on XR, CT, and MR; abnormal marrow SI on MR.	Hypertrophic pulmonary osteoarthropathy
<b>Intra-articular Tissue Abnormalities (ankle, subtalar, talonavicular)</b>	
Osteophytes, joint space narrowing, subchondral sclerosis or cysts, joint effusion on XR, CT, and MR; focal articular cartilage defects on MR, CT-arthrography, and MR-arthrography.	Osteoarthritis
Loss of joint space, erosions on XR, CT, and MR; abnormal marrow SI MR.	Rheumatoid arthritis
Chondrocalcinosis on XR, CT; secondary osteoarthritis on XR, CT, and MR	Crystal arthropathy
Contour abnormality or focal lucency on XR and CT; abnormal SI on MR.	Osteochondral lesion of the talar dome
Swelling from joint effusion, loss of joint space, periostitis (with osteomyelitis) on XR, CT, and MR; abnormal marrow SI on MR	Infectious arthritis
Soft tissue swelling on XR, CT, and MR; discontinuous ligament on MR.	Ankle sprain
<b>Juxta-articular Tissue Abnormalities</b>	
Swelling on XR, CT, US, and MR; swelling, abnormal fibers, or discontinuity of the tendon and/or peritendinous fluid on MR and US.	Tendinopathy including tendon tear
Heel spur on XR, CT, and MR; calcification of the tendon on XR and CT; decreased SI in the tendon on MR.	Enthesopathy
Soft tissue swelling on XR, CT, US, and MR; focal fluid collection on US and MR.	Bursitis
None on XR or CT; swelling, increased SI or discontinuity on MR.	Plantar fasciitis or sprain
Normal XR and CT; replacement of sinus fat and obliteration of ligament definition on MR	Sinus tarsi syndrome

## **DICTIONARY TEMPLATE WITH PROMPTS FOR ANKLE RADIOGRAPHS PERFORMED FOR ANKLE PAIN**

### **ANKLE RADIOGRAPHS**

**INDICATION:** Ankle pain.

**COMPARISON:** [Check priors to see if following a known lesion.]

**TECHNIQUE:** [].

**Bones:** [Discontinuity or displaced fragment (fracture). Periostitis (infection, hypertrophic pulmonary osteoarthropathy). Erosion (infection, inflammatory arthropathy), osteophytes or subchondral cysts (osteoarthritis), focal increased density or talar dome contour abnormality (osteoarthritis). Peri-articular lucency (inflammatory arthropathy, complex regional pain syndrome, disuse osteoporosis).

**Joints:** [Narrowing of the joint (arthritis), osteophytes (osteoarthritis), chondrocalcinosis (CPPD or gout). Joint effusion (inflammation or hemorrhage following occult fracture). Fused subtalar joints (subtalar coalition). Calcified or ossified fragments projecting in the joint space (loose bodies).

**Juxta-articular tissues:** [Calcification of the soft tissue (CPPD, gout). No vascular calcifications (suggesting arterial insufficiency and claudication).]

**IMPRESSION:** []

## **DICTIONARY TEMPLATE WITH PROMPTS FOR ANKLE MRI PERFORMED FOR ANKLE PAIN**

MR ANKLE

INDICATION: Ankle pain.

COMPARISON: [Check priors to see if following a known lesion.]

TECHNIQUE: [].

Bones: [Discontinuous bone cortex (fracture, tumor, inflammation, or infection, osteochondral defect of the talar dome). Erosion (inflammatory arthropathy, infection). Increased signal on T2 weighted images (subchondral marrow degenerative changes, contusion, fracture, tumor, infection, avascular necrosis, osteochondral defect of the talar dome). “Double line” sign (avascular necrosis). Osteophytes (osteoarthritis). Talar beak (tarsal coalition).

Articulations: [Articular cartilage loss (arthritis, osteochondral lesion of the talar dome). Joint effusion (inflammation or trauma).

Juxta-articular tissues:

Ligaments: [Swelling, abnormal signal intensity, or discontinuity of the talofibular, posterior talofibular, and calcaneofibular ligaments (lateral ligament tear). Swelling, abnormal signal intensity or discontinuity of the deltoid ligament complex (medial ligament tear). Swelling, abnormal signal intensity, or discontinuity of the distal tib-fib ligaments (no “high ankle sprain”). ]

Tendons: [Abnormal signal or swelling (partial thickness tendon tear) or discontinuity (full thickness tendon tear). Excessive fluid along the tendon sheath (tenosynovitis). Peroneus brevis tendon split.]

Plantar aponeurosis: [Increased signal intensity (sprain, inflammation) or discontinuity (tear).]

IMPRESSION: [].