

**SELECT HELTH NETWORK, INC.
PHYSICIAN PRACTICE GUIDELINES**

SUBJECT: MRI Ankle

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7/19, 6/20**

Source: Milliman Inc.

<https://acsearch.acr.org/docs/69436/Narrative/>
<https://acsearch.acr.org/docs/69436/EvidenceTable/>
<https://acsearch.acr.org/docs/69422/Narrative/>
<https://acsearch.acr.org/docs/69422/EvidenceTable/>
<https://acsearch.acr.org/list> (appropriateness criteria)

General Guidelines: An MRI is not indicated for ankle pain alone.
A plain film of the ankle should be performed prior to MRI.

Indications: Ankle Pain

- I. Ankle MRI is indicated for Chronic ankle pain with Normal Radiographs and ONE of the following:
 - A. Persistent pain of unclear etiology.
 - B. Suspected osteochondral injuries.
 - C. Suspected inflammatory arthritis.
 - D. Suspected osteonecrosis as indicated by ANY ONE of the following:
 1. Pain, stiffness and swelling associated with localized tenderness to pressure.
 2. Persistent pain in patient with sickle cell anemia or chronic corticosteroid usage.
 3. Bone scan demonstrating well-localized increased uptake.
 - E. Suspected ankle impingement syndrome
 - F. Suspected ankle instability
 - G. Suspected tendon abnormality
 - H. Indeterminate lesions seen on plain x-ray or CT scan.

- II. Ankle trauma and ANY ONE of the following
 - A. Radiographs suspicious for osteochondral injury
 - B. Radiographs or physical exam suspicious for syndesmotomic injury

- III. Suspected fatigue stress fracture and ALL of the following:
 - A. History of overuse or excessive activity.
 - B. Localized pain.
 - C. Symptoms persist or recur despite rest.

- D. Normal findings on plain x-ray.
- E. Bone scan contraindicated, suboptimal or nonspecific due to possibility of infectious or inflammatory process.

- IV. Suspected insufficiency stress fracture and ALL of the following:
- A. Localized pain.
 - B. Osteopenia
 - C. Negative findings on plain x-ray.
 - D. Bone scan negative, contraindicated or nonspecific due to possibility of infectious or inflammatory process.

Indications: Bone Neoplasms.

- V. Ankle MRI is indicated for bone neoplasm and ANY ONE of the following:
- A. Abnormal finding on plain x-ray.
 - B. Palpable bone abnormality with normal finding on plain x-ray.
 - C. Current diagnosis of cancer located elsewhere and ANY ONE of the following:
 1. Unexplained localized signs and symptoms.
 2. Abnormal findings on plain x-ray or bone scan.
 - D. Persistent pain of unclear etiology.
 - E. Ewing sarcoma or osteosarcoma and ANY ONE of the following:
 1. Initial staging.
 2. Monitoring response after treatment completed.
 3. Surveillance for tumor recurrence, including ANY ONE of the following:
 - a. Every 3 months for years 1 and 2.
 - b. Every 4 months for year 3.
 - c. Every 6 months for year 4 and 5.
 - d. Annually after 5 years.

Indications: Osteomyelitis

- VI. Ankle MRI is indicated for osteomyelitis and ANY ONE of the following:
- A. Localized bone pain associated with chills or fever, particularly after trauma or orthopedic surgery.
 - B. Cellulitis that responds poorly to antibiotics.
 - C. Diabetes or severe peripheral vascular disease and ANY ONE of the following:
 1. Persistent ankle pain, even without ulcer present.
 2. Persistent or worsening ulcer.
 - D. Focal lesion seen on bone scan.
 - E. Suspected sinus tract infection from ulcer.

Indications: Tendon Injury

- VII. Ankle MRI is indicated for soft tissue mass, tumor or other abnormalities and ANY one of the following:
- A. Soft tissue mass and ANY ONE of the following:
 1. Deep or large masses.
 2. Concern for effect on adjacent anatomic structures.
 3. Vascular lesions, particularly in child and ANY ONE of the following:
 - a. Growth.
 - b. Change in color of overlying skin.
 - c. Causing pain.

4. Progressively enlarging.
- B. Soft tissue sarcoma and ANY ONE of the following:
1. Initial staging.
 2. Within 3 months after treatment completed.
 3. Post-treatment surveillance annually.
 4. Abnormal physical findings after treatment completed.
 5. Soft tissue muscle abscess, when performed for planning biopsy or surgical treatment.
- C. Evaluation of synovial pathology: examples include:
1. Chronic synovitis secondary to ankle hemarthrosis of hemophilia.
 2. Surveillance following synovectomy for pigmented villonodular synovitis.