

SELECT HEALTH NETWORK, INC.
PHYSICIAN PRACTICE GUIDELINES

SUBJECT: MRI Foot and Foot Joints

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Source: Milliman Inc.
<https://acsearch.acr.org/docs/70546/Narrative/>
<https://acsearch.acr.org/docs/70546/EvidenceTable/>
<https://acsearch.acr.org/docs/69424/Narrative/>
<https://acsearch.acr.org/docs/69424/EvidenceTable/>
<https://acsearch.acr.org/list>

General Guidelines: MRI foot and foot joint is not indicated for foot pain alone.
A plain film x-ray of foot and foot joints should be performed prior to MRI.

Indications:

- I. MRI for unexplained foot pain is indicated when **ANY ONE** of the following is present:
 - A. Persistent pain of unclear etiology with normal plain x-rays.
 - B. Indeterminate lesions on plain x-ray or CT scan.
 - C. Suspected osteochondral injury with normal plain x-ray.
 - D. Focal radiolucency on plain x-ray (suspected or osteochondritis dissecans).
 - E. Bone scan demonstrates well-localized increased uptake.
 - F. Persistent but unexplained foot pain, particularly after trauma.
 - G. Tarsal tunnel syndrome, only when suspicion of space occupying lesions present.
 - H. Suspected osteomyelitis (See osteomyelitis section in this guideline).
 - I. Suspected stress fracture as indicated of **ALL** the following (unenhanced).
 1. History of overuse or excessive activity.
 2. Localized pain.
 3. Symptoms persist or recur despite rest.
 4. Normal findings on plain x-rays.
 5. Concerns regarding infection, soft tissue injury or inflammatory process make bone scan suboptimal.
 - J. Suspected muscle, tendon or ligament disorders or tears. (to include LisFranc injury)
 - K. Tarsal Coalition
 - L. Concern for inflammatory arthropathy
 - M. Concern for plantar fasciitis that is resistant to conventional therapy.
- II. MRI, foot or foot joints, is indicated for Morton Neuroma (Interdigital Neuroma) when **ALL** of the following is present:
 - A. Suspected Morton neuroma: findings **MAY INCLUDE**:
 1. Pain in **WEB** space, most commonly between the third and fourth digit.
 2. Numbness radiating to toes.
 - B. Failure of conservative care, treatments **MAY INCLUDE**:

1. Orthotics.
 2. Elimination of offending shoes.
 3. Local steroid injection.
- C. Indeterminate diagnosis of previous procedures done.
- III. MRI, foot or foot joints, is indicated for malignant or benign bone neoplasms when **ANYONE** of the following are present:
- A. Abnormal finding on plain x-ray or bone scan.
 - B. Palpable bony abnormality with normal plain x-ray.
 - C. Known diagnosis of cancer located elsewhere **AND ANY ONE** of the following:
 1. Unexplained localized signs and symptoms.
 2. Indeterminate 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. Every 6 months for 2 years, especially for Ewing sarcoma.
- IV. MRI, foot or foot joints, is indicated for suspected osteomyelitis and **ANY ONE** of the following:
- A. Localized bone pain associated with chills or fever, particularly after trauma or orthopedic surgery.
 - B. Overlying cellulitis that responds poorly to antibiotics.
 - C. Diabetes or severe peripheral vascular disease **AND ANY ONE** of the following:
 1. Persistent foot pain, even without ulcer present.
 2. Persistent or worsening ulcer.
 - D. Focal lesion seen on bone scan.
 - E. Suspected sinus tract infection (enhanced when considering surgery)
- V. MRI, foot or foot joints, is indicated for soft tissue mass, tumor or other abnormalities for **ANY ONE** of the following:
- A. Soft tissue mass **AND ANY ONE** of the following:
 1. Deep or large masses.
 2. Masses that cross anatomic boundaries.
 3. Concern for effect on adjacent anatomical structures.
 - B. Vascular lesions, particularly in child and **ANY ONE** of the following:
 1. Growth
 2. Change in color of overlying skin
 3. Causing pain
 4. Progressively enlarging
 - C. Soft tissue sarcoma **AND ANY ONE** of the following:
 1. Initial staging
 2. Within 3 months after treatment completed
 3. Post-treatment surveillance, annually for 5 years
 4. Abnormal physical findings after treatment completed
 - D. Soft tissue muscle abscess, when performed for planning of biopsy or surgical treatment.