MRI Lower Extremities

When calling Anthem (1-800-533-1120) or using the Point of Care authorization system for a Health Service Review, the following clinical information may be needed to process your request. Being prepared with complete information will help expedite our response.

**Generally with all requests, we will need:**

- Diagnosis or symptoms that the patient is displaying and the duration of symptoms
- Any “rule out” conditions
- Any previous radiological studies and results
- Any previous therapeutic treatment and the results of that treatment

*In some instances we will only need the diagnosis and symptoms. For these conditions, the following information may be asked.*

<table>
<thead>
<tr>
<th>Lower Extremity</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>73718</td>
<td>73719</td>
<td>MRI lower extremity, other than joint w/o contrast</td>
</tr>
<tr>
<td>73720</td>
<td>73721</td>
<td>MRI lower extremity, other than joint w/c contrast</td>
</tr>
<tr>
<td>73722</td>
<td>73723</td>
<td>MRI lower extremity, any joint w/c contrast</td>
</tr>
</tbody>
</table>

**Bone tumors (all bones)**

- Suspect bone tumor with
  - Abnormal finding on x-ray or bone scan
  - Palpable bony abnormality with normal x-ray
  - Known diagnosis of cancer located elsewhere associated with unexplained signs and symptoms
  - Persistent pain of unclear etiology
  - Surveillance of benign tumors
- Follow up
  - After treatment for either primary or metastatic cancer, including single bone metastases of the bone
  - Soft tissue tumor follow up for suspected metastasis post therapy
- Differentiate between a benign and malignant process
- Primary bone tumors suspected:
  - Persistent symptoms (particularly localized pain) with a negative radiograph
  - Suspicious or malignant characteristics on radiograph
- Metastatic bone disease
  - Breast cancer patient with hot lesion(s) to the spine found on bone scan with no back pain and negative plain films
  - Otherwise healthy elderly patient with known malignancy presenting with back pain and partially collapsed vertebra on plain films
  - Elderly female with known primary presenting with acute vertebral collapse on plain x-ray and CT.
Hip/Pelvic Bones

- Suspected avascular necrosis of the femoral head;
  - Plain films show mottled femoral head
  - Clinically suspect vascular necrosis with normal radiographs
- Suspect intra or extra articular abnormality (e.g. loose body)
- Suspect osteomyelitis with
  - Confirmation of findings on bone scan
  - Initial diagnosis with symptoms suggesting osteomyelitis such as localized pain, positive blood culture and fever
- Differentiate fracture versus metastasis in long bone with
  - Normal plain films
  - Hot nonspecific bone scan
- Edema
- Suspect soft tissue neoplasm
- Suspect occult fracture;
  - Symptoms suggestive of hip or acetabular fracture which may include pain with weight bearing or rotation, shortening of the leg, and inability to bear weight
  - Negative films of pelvis
- Post op follow up to hip arthroplasty (THR)
- Chronic hip pain
  - With negative x-rays and
    - Suspect osseous or surrounding soft tissue abnormality (excluding osteoid osteoma)
    - Suspect osteonecrosis in asymptomatic hip due to known predisposing factors
    - Suspect labral tear
  - With positive x-rays suggestive of one of the following
    - Pigmented villonodular synovitis
    - Osteochondromatosis
- Pediatric hip pain
  - Diagnosis of slipped capital femoral epiphyses
  - Suspect avascular necrosis or osteonecrosis when symptoms persist
  - Suspect tumor
  - Limping without explanation on x-ray, bone scan, physical exam or laboratory evaluation
  - Chronic or persistent hip pain
  - Suspect osteomyelitis
  - Suspect soft tissue neoplasm
  - Suspect occult fracture with
    - Symptoms suggestive of hip or acetabular fracture that may include pain with weight bearing or rotation, shortening of the leg or inability to bear weight.
    - Negative plain film of hip (AP, frog, lateral views)

Leg

- Suspected osteomyelitis with
  - Pain associated with chills or fever particularly after trauma or orthopedic surgery
  - Overlying cellulitis that responded poorly to antibiotics
  - Chronic skin ulcer
  - Persistent or worsening ulcer without obvious bone exposure in patient with diabetes or severe PVD
  - Focal lesion seen on bone scan
- Edema
- Limb pain
  - Pain with unclear etiology
  - Indeterminate lesion on plain film or CT scan
  - Focal radiolucency on plain film (suspected osteonecrosis)
Bone scan demonstrates well localized, increased uptake

Suspected stress fracture and
- History of overuse or excessive activity
- Localized pain
- Symptoms persist or recur despite rest
- 2 normal plain films at least 3 weeks apart
- Concerns regarding infection or inflammatory process make bone scan suboptimal

Suspected muscle tear

Soft tissue mass with
- Deep or large mass
- Masses that cross anatomical boundaries
- Mass that affects the adjacent anatomical structures
- Vascular lesion with growth or change in color of overlying skin
- Soft tissue abscess or pyomyositis (muscle abscess)
- Mass that is causing pain
- Mass that is progressively enlarging

Sprained leg

Knee
- Meniscal tear, cruciate or multiligament injury with pain and instability evidence
  - Pivotal shift, positive McMurray’s sign (meniscal tear), positive Lachman’s test (ALC injury), locking.
- Suspected ligament tear with
  - Positive anterior or posterior drawer sign
  - Positive Lachman’s test
  - Post traumatic effusion, usually bloody
  - Inability to bear weight after injury
  - History of tearing or popping after acute injury
  - Symptoms of instability with chronic injury
  - Laxity with valgus or varus stresses to knee
- Meniscal tear without instability, non responsive to physical therapy and medication
- Suspected meniscal injury;
  - Restricted range of motion, buckling or locking
  - Effusion with acute injury or with subsequent episodes of minor injury or vigorous activity
  - Sensitivity to palpation along the medial or lateral joint line
  - Positive McMurray on physical exam
- Avascular necrosis, knee.
- Intra articular loose body.
- Persistent knee pain with persistent or recurrent swelling and/or joint tenderness refractory to conservative treatment.
- Post op follow up for knee arthroplasty (TKR)
- Edema
- Nontraumatic knee pain
- Child or adolescent with
  - Nonpatellofemoral symptoms and non diagnostic (demonstrate normal findings or a joint effusion) initial AP and lateral radiographs
  - Patellofemoral (anterior) symptoms with non diagnostic (demonstrate normal findings or a joint effusion) initial AP, lateral, and axial radiographs
- Adult with non trauma, non tumor, and non localized pain with
  - Non diagnostic (demonstrate normal findings or a joint effusion) initial AP and lateral radiographs
  - Initial AP and lateral radiographs demonstrate evidence of internal derangement (e.g. Peligrini Stieda disease, joint compartment widening)
MRI LOWER EXTREMITIES IMAGING
FACT SHEET

- Traumatic knee pain
- Osteoarthritis
  - Suspected ligament or meniscal tear
  - Suspected osteonecrosis
- Chronic knee pain
  - Normal x-ray
  - Normal physical exam
  - No other explanation for the pain such as inflammatory arthritis, DJD, stress fracture, etc.
- Baker’s cyst associated with clinical evidence of meniscal or ligamentous injury and ultrasound is non diagnostic
- Regional sympathetic dystrophy
- Suspected osteonecrosis;
  - Focal radiolucency on plain x-ray
  - Bone scan demonstrates well localized, increased uptake
  - Knee pain and history suggestive of increased risk for osteonecrosis due to
    - Previous trauma
    - Hemoglobinopathy, particularly sickle cell anemia
    - Chronic corticosteroid use
- Suspected stress fracture with
  - Concerns regarding infection or inflammatory process make bone scan suboptimal
  - History of overuse or excessive activity
  - Localized pain
  - Symptoms persist or recur despite rest
  - 2 normal plain films at least 3 weeks apart
- Suspected tear of extensor mechanism (e.g. quadriceps or patellar tendons)
- Suspected osteomyelitis with
  - Pain associated with chills and fever particularly after trauma or orthopedic surgery
  - Overlying cellulitis that responds poorly to antibiotics
  - Persistent leg pain in patients with diabetes or severe PVD
  - Persistent or worsening ulcer (without obvious bone exposure) in patient with diabetes or severe PVD
  - Focal lesion seen on bone scan
- Dislocation of patella preoperatively for patients with recurrent dislocation
- Sprained knee

Ankle

- Suspected avascular necrosis
- Suspected tendon rupture
- Suspected intra articular loose body
- Acute injury with ligament instability
- Edema
- Sprained ankle
- Chronic ankle pain with
  - Suspected osteochondral injury with normal plain films
  - Suspected tendinopathy with normal plain films
- Unexplained ankle pain with
  - Suspected Achilles rupture with
    - Acute rupture where diagnosis is equivocal
    - Chronic rupture, to differentiate between complete or partial tears
  - Persistent pain with uncertain etiology with normal x-rays
  - Indeterminate lesion on plain film or CT scan
  - Focal radiolucency (suspected osteonecrosis) on plain film
  - Bone scan demonstrates well localized, increased uptake
Loose body in joint space
Instability on physical exam (suspected ligament tear)
Recurrent sprains (suspected ligament tear)

Suspected osteomyelitis with
Localized ankle pain associated with chills and fever particularly after trauma or orthopedic surgery
Overlying cellulitis with poor response to antibiotics
Persistent or worsening ulcer (without obvious bone exposure) in patient with diabetes or severe PVD
Focal lesion seen on bone scan
Suspected sinus tract infection from ulcer

Suspected stress fracture with
History of overuse or excessive activity
Localized pain
Symptoms persist or recur despite rest
2 normal plain films at least 3 weeks apart
Concerns regarding infection or inflammatory process make bone scan suboptimal

Soft tissue mass with
Deep or large mass
Masses that cross anatomical boundaries
Mass that affects the adjacent anatomical structures
Vascular lesion with either growth or change in color of overlying skin
Mass that is causing pain
Mass that is progressively enlarging

Foot
Unexplained foot pain
Persistent pain of unclear etiology
Intermediate lesion on plain x-ray or CT scan
Suspected osteochondral injury with normal plain film
Suspected osteonecrosis due to focal radiolucency on plain x-ray
Bone scan demonstrates well localized, increased uptake
Persistent unexplained foot pain, particularly after trauma
Tarsal tunnel syndrome, only when suspicion of space occupying lesions present

Chronic foot pain
Pain/tenderness over navicular tuberosity unresponsive to conservative therapy
Plain radiographs showed accessory navicular
Athlete with pain/tenderness over tarsal navicular with unremarkable plain radiographs
Middle aged woman with burning pain and paresthesia along plantar surface of the foot and toes (suspect tarsal tunneling syndrome)
Pain in the 3-4 web space with radiation to the toes (suspect Morton’s neuroma)
Young athlete with localized pain at the plantar aspect of the heel (suspect plantar fasciitis)

Suspected osteomyelitis with
Persistent pain in patients with diabetes or severe PVD
Persistent or worsening ulcer particularly when sinus tract infection or abscess present
Pain associated with chills and fever particularly after trauma or orthopedic surgery
Overlying cellulitis that responds poorly to antibiotics
Focal lesion seen on bone scan
Suspected sinus tract infection from ulcer

Suspected stress fracture with
History of overuse or excessive activity
Localized pain
Symptoms persist or recur despite rest
2 normal plain films at least 3 weeks apart
Concerns regarding infection or inflammatory process make bone scan suboptimal

- Soft tissue mass with
  - Deep or large mass
  - Masses that cross anatomical boundaries
  - Mass that affects the adjacent anatomical structures
  - Vascular lesion with either growth or change in color of overlying skin
  - Soft tissue abscess or pyomyositis (muscle abscess)
  - Mass that is causing pain
  - Mass that is progressively enlarging

- Morton's or Interdigital Neuroma with
  - Suspected Morton’s neuroma by findings such as pain in 3rd and 4th space and numbness radiating to toes
  - Failure of conservative care such as orthotics, elimination of offending shoes and local steroid injection
  - Intermediate diagnosis or previous procedures done

**Toe**

- Toe pain with suspected osteomyelitis;
  - Pain associated with chills and fever
  - Overlying cellulitis with poor response to antibiotics
  - Persistent pain without ulcers present in patient with diabetes or severe PVD
  - Persistent or worsening ulcer without bone exposure in patient with diabetes or severe PVD
  - Focal lesion seen on bone scan

**Pre-procedure, procedure or treatment**

- For preoperative evaluation (identifies extension of infection into bone, peritoneum, cord and nerve roots)

**Post-procedure**

- Hip arthroscopy
- Knee arthroscopy

**Screening**

- Asymptomatic patients without a diagnosis

**Other** – provide clinical information