

MRI Shoulder Guidelines**DEPARTMENT: Utilization Management Physician Practice Guidelines****EFFECTIVE DATE: 08/04****DATE LAST REVIEWED: 02/21****SOURCES:** Milliman Inc.<https://acsearch.acr.org/docs/69433/Narrative/><https://acsearch.acr.org/docs/69433/EvidenceTable/><https://acsearch.acr.org/docs/3101482/Narrative/><https://acsearch.acr.org/docs/3097211/Narrative/><http://www.diagnosticimaging.com/mri/ge-unveils-mr-protocol-patients-metal-implants>**RECOMMENDED GUIDELINES:**

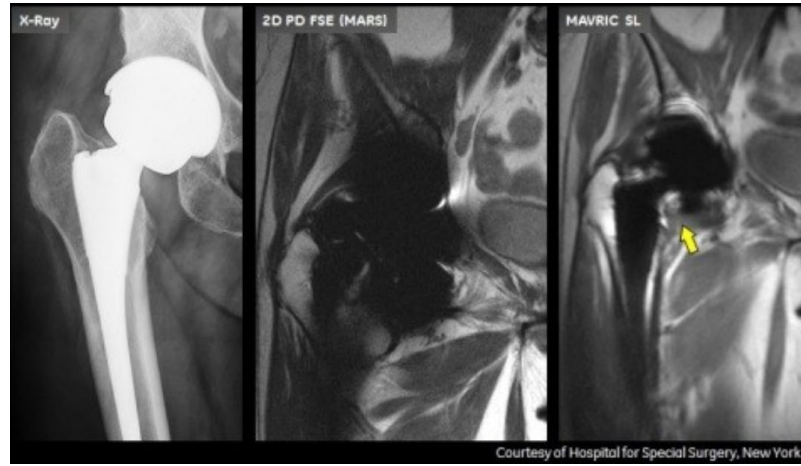
MRI is not indicated for shoulder pain alone.

Indications:

- 1) MRI shoulder is indicated for Shoulder Pain and ANY ONE of the following:
 - a) Suspected rotator cuff tears as indicated by ANY ONE of the following:
 - i) Shoulder pain consistent with rotator cuff tear (eg, rest pain, pain radiating down lateral portion of arm, nocturnal pain) that has not responded to at least 6 weeks of nonoperative treatment; examples include:
 - ii) Nsaids
 - iii) Physical Therapy
 - iv) Corticosteroid injections
 - v) Weakness with strength testing of rotator cuff, particularly with external rotation or supraspinatus test
 - vi) Previous rotator cuff repair, suspect re-tear. (MR Arthrography is considered equivalent to Non contrast MRI)
 - b) Chronic shoulder pain of unclear etiology and ANY ONE of the following:
 - i) Normal results of plain xrays of the shoulder
 - ii) No improvement with at least 6 weeks of nonoperative treatment; examples include:
 - (1) Rest
 - (2) Nsaids
 - (3) Physical Therapy
 - iii) Indeterminate lesions on plain xray or CT scan
 - iv) Anterior or posterior instability of shoulder
 - v) Recurrent anterior subluxation findings may include:
 - (1) Pain with overhead activities
 - (2) Sensation of glenohumeral slipping with certain arm positions or complete dislocation of glenohumeral joint
 - (3) Dead arm syndrome (ie, numbness, tingling, or transient loss of sensation with certain positions)

- vi) Suspected labral tears, including superior labrum anterior and posterior (Slap) lesions (MR Arthrography is preferred over non contrast MRI)
 - vii) Pain after violent trauma
 - viii) Evaluation of biceps tendon for ANY ONE of the following:
 - (1) Pain that is unresponsive to Nsaids and physical therapy
 - (2) Instability or weakness indicating tendon tear
 - ix) Suspected osteonecrosis or osteochondritis dissecans as indicated by ANY ONE of the following:
 - (1) Shoulder pain, stiffness and swelling associated with localized tenderness to pressure
 - (2) Persistent shoulder pain in patient with sickle cell anemia or chronic corticosteroid usage
 - (3) Focal radiolucency on plain xray of shoulder
 - (4) Bone scan demonstrates well localized increased uptake
- 2) MRI of shoulder is indicated for bone neoplasm and ANY ONE of the following:
- a) Abnormal findings on plain xray or bone scan
 - b) Palpable bony abnormality with normal plain xray
 - c) Known diagnosis of cancer located elsewhere and ANY ONE of the following:
 - i) Unexplained localized signs and symptoms
 - ii) Abnormal finding on plain xray or bone scan
 - d) Pain of unclear etiology
 - e) Ewing Sarcoma or osteosarcoma and ANY ONE of the following:
 - i) Initial staging
 - ii) Post treatment monitoring
 - iii) Surveillance for tumor recurrence including ANY ONE of the following:
 - (1) Every 3 months for 2 years
 - (2) Every 4 months for year 3
 - (3) Every 6 months for year 4 and 5
 - (4) Annually after 5 years
- 3) MRI of shoulder 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:
 - i) Deep or large masses
 - ii) Masses that cross anatomic boundaries
 - iii) Concern for effect on adjacent anatomic structure
 - iv) 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
 - v) 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.
 - vi) Soft tissue muscle abscess, when performed for planning of biopsy or surgical treatment
 - vii) Suspected muscle tear
- 4) MRI of shoulder in setting of infection
- a) Septic arthritis to evaluate for osteomyelitis and monitor success of treatment
- 5) MRI Shoulder in setting of shoulder prosthesis
- a) MAVRIC protocol (2013) to image soft tissues around a prosthesis—tendon and muscle pathology—tendon tears, tendonitis, bursitis, etc. GE scanner at SJRMC
 - b) All non-osseous pathology/indications listed above

c)



6) MRI shoulder is indicated for chronic shoulder pain and suspicions for inflammatory arthritis (e.g. rheumatoid arthritis, seronegative spondyloarthropathy, and gout).