

Imaging Findings	Cause
<b>Bone Abnormalities</b>	
Discontinuous cortex and displaced bone fragment on XR, CT, and MR; abnormal marrow SI on MR	Fracture
Focal lucency on XR and CT; reparative new bone/periostitis on XR, CT, and MR; abnormal SI on MR	Stress fracture (especially distal clavicle osteolysis).
Destroyed bone cortex, absent trabeculae, associated soft tissue mass on XR, CT, and MR; increased (with blastic) versus decreased (with lytic) bone density on XR, CT; abnormal bone marrow SI with MR	Primary and metastatic bone tumors
Increased bone density on XR, CT; abnormal contour on XR, CT, and MR; abnormal marrow SI with “double line” on MR	Avascular necrosis (AVN)
	Posterior glenoid deficiency
<b>Joint Tissue Abnormalities (AC or GH)</b>	
Widening and/or offset along the AC joint	AC joint injury
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, marginal erosions on XR, CT, and MR; abnormal synovium and marrow SI on MR	Rheumatoid arthritis
Chondrocalcinosis and/or soft tissue calcifications on XR, CT, MR; secondary osteoarthritis on XR, CT, and MR	Crystal arthropathy
Swelling from joint effusion, loss of joint space, periostitis (with osteomyelitis) on XR, CT, and MR; abnormal marrow SI on MR	Septic arthritis
None on XR; defect of the labrum on MR, MR-arthrography, or CT-arthrography	Labral tear
<b>Extra-articular Soft Tissue Abnormalities</b>	
Reduced capacity of the joint at arthrography; enhancing proliferative synovium on MR	Adhesive capsulitis
Usually none on XR; fluid in the bursa on MR, CT, and US	Bursitis
Acute: None on XR; extravasation of injected contrast material into the subacromial-subdeltoid bursa at arthrography; direct visualization of the defect on US and MR Chronic: Secondary boney remodeling and GH degenerative changes on XR, CT, and MR; direct visualization of the defect on US and MR	Rotator cuff tear
None on XR; direct visualization of the defect on US and MR (absent intra-articular tendon from tendon retraction)	Proximal biceps tendon tear
Calcifications of the tendon on XR and CT; tendon swelling, abnormal tendon signal and peritendinous fluid on US and MR	Tendinitis (including calcific tendinitis)
Calcification on XR and CT; abnormal SI or absence on MR or MR-arthrography	Ligament abnormalities
Downward sloping or spur formation along the lateral/anterior acromion, reduced acromioclavicular distance on XR, CT, and MR	Impingement syndrome
None on XR; atrophy of the teres minor on MR	Quadrilateral space

	syndrome
None on XR and CT; denervation changes of abnormal muscle SI on MR	Parsonage Turner Syndrome
Mass in the visualized lung on XR, CT, or MR	Chest tumors

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

### SHOULDER RADIOGRAPHS

INDICATION: Shoulder pain.

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

TECHNIQUE: []

Bones: [Discontinuity of cortex (fracture, tumor, inflammation, or infection). Erosion (inflammatory arthropathy, infection, osteolysis of the distal clavicle). Spur along the undersurface of the acromion (impingement syndrome).]

Joints: [Offset of the clavicle relative to the acromion (dislocation/subluxation/sprain). Offset of the humerus relative to the glenoid (dislocation/subluxation). Narrowing (arthritis). Osteophytes (osteoarthritis). Chondrocalcinosis and/or calcified synovium (crystal arthropathy). Loose bodies (osteoarthritis).]

Extra-articular soft tissues: [Calcification (calcific tendinitis, synovial calcification, tophus). Swelling (bursitis, soft tissue tumor). Lung abnormality (pneumothorax, tumor).

IMPRESSION: []

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

### MRI SHOULDER

INDICATION: Shoulder pain.

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

TECHNIQUE: []

### FINDINGS:

Bones: [Discontinuous cortex (fracture, tumor, inflammation or infection). Erosion (inflammatory arthropathy, infection, distal clavicular osteolysis). Spur along the undersurface of the acromion (impingement syndrome). Increased signal on T2 weighted images (contusion, fracture, tumor, infection). Serpentine “double-line sign” (avascular necrosis).]

Joints: [Effusion (post-traumatic; arthritis). Offset of the clavicle relative to the acromion (dislocation/subluxation/sprain). Offset of the humerus relative to the glenoid (dislocation/subluxation). Cartilage loss (arthropathy or focal defect from trauma). Osteophytes, narrowing, or subchondral marrow changes (degenerative disease). Labral discontinuity or displacement (labral tear). Biceps tendon split, displacement, or absence (from complete tear with retraction). Disproportionate fluid signal along the tendon sleeve (biceps tendon tenosynovitis). Loose body (osteoarthritis). Normal position (biceps tendon dislocation).]

Extra-articular soft tissues: [Rotator cuff discontinuity (full thickness tear) or abnormal signal intensity/swelling (partial thickness tear/tendinopathy). Fluid along the long axis of the rotator cuff muscles (longitudinal split). Fluid in the subacromial/subdeltoid bursa (full thickness rotator cuff tear with migration of effusion fluid, bursitis).]

IMPRESSION: []