BRYAN**RADIOLOGY**ASSOCIATES

Brazos Valley's leader in advanced diagnostic imaging since 1962
2722 Osler Blvd Bryan, TX 77802; 979-776-8291

MSK MR Protocol

Soft Tissue Mass

Mark location of mass with skin markers
****Second plane T1 (sagittal or coronal) based on location of lesion (Anterior or posterior lesions = sagittal. Medial or lateral lesions = coronal.)**

Ax T2 FS (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6-8)
Ax T1
Cor STIR
Sag STIR
****Sag/Cor T1**
Axial T1 post contrast
****Sag/Cor T1 FS post contrast**

Bone Mass
Same as Soft Tissue Mass but add:
Lg FOV Cor T1 (from joint above lesion to joint below) in body coil

Infection (Cellultis, Osteomyelitis, Abcess)

Mark location of any open wounds with skin markers
****Second plane (sagittal or coronal) based on location of affected part (Anterior or posterior lesions: sagittal. Medial or lateral lesions: coronal.).**

Ax T2 FS (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6-8)
Ax T1
Cor STIR
Sag STIR
****Sag/Cor T1**
Axial T1 post contrast
Sag T1 FS post contrast
Cor T1 FS post contrast

Shoulder

Cor Loc
3 Plane Loc

Shim
Map
Ax PD Fs
Cor T1
Cor T2 Fs
Cor PD Fs
Sag T2 Fs
Sag PD Fs

Shoulder Arthrogram

Cor Loc
3 Plane Loc
Shim
Map
Ax T1 Fs
Cor T1 Fs
Cor T2 Fs
Cor Pd Fs
Sag T1 Fs
Aber View-Cor Loc
3 Plane Loc
Shim
Ax T1 Fs-Aber

Humerus (Arm, Forearm, Thigh, Tib/Fib)

Cor Loc
3 Plane Loc
Shim
Cor T1
Cor Stir
Ax T2 FS (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6-8)
Ax T1
Sag PD Fs
Sag T1

Elbow

Cor Loc
3 Plane Loc
Shim
Ax T1

Post Arthrogram Elbow

Ax T1 Fs
Cor T1 Fs
Sag T1 Fs
Cor PD FS

Cor PD Fs
Sag STIR
Ax PD Fs
Ax T2 FS
Ax T2 Fs (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6-8)
Cor T2 Fs (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6-8)

Wrist

Cor Loc
3 Plane Loc
Shim
Map
Ax T1
Ax T2 Fs (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6 to 8)
Ax PD Fs
Cor T1
Cor PD Fs
Sag STIR

Post Arthrogram Wrist

Ax T1 Fs
Cor T1 Fs
Sag T1 Fs
Cor PD FS
Cor T1
Ax T2 Fs (TR 3000-4000,TE 40-50,ETL6-8)

Hand

Cor Loc
3 Plane Loc
Shim
Map
Cor T1
Cor STIR
Ax PD Fs
Ax T1
Ax T2 FS (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6-8)
Sag T2 FS (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6-8)

Wrist & Hand Arthritis

FOV to cover from proximal to the distal radioulnar joint to the metacarpophalangeal joints distally, inclusive (8 -10 cm)
Axial T1
Axial T2 (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6-8)
Cor STIR
Sag PD FS

Cor T1
Cor PD FS
Ax T1 Post Gad
Cor T1 FS Post Gad

Finger

Use small FOV. Planes are configured to particular finger, e.g., thumb is a different plane than 2-5 fingers.
Cor Loc
3 Plane Loc
Shim
Map
Cor T1
Cor STIR
Ax T1
Ax T2 Fs (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6 to 8)
Sag T1
Sag T2 Fs (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6 to 8)
Sag PD Fs

SI Joints (arthritis, sacroilitis)

3 Plane Loc
Shim
Map
Cor STIR Lg FOV
Ax T1 Fs Sm FOV
Ax STIR Sm FOV
Cor Pd Fs (angled) Sm FOV
Cor T1 (angled) Sm FOV
Ax T1 Fs-post contrast Sm FOV
Cor T1 Fs-post contrast (angled) Sm FOV

Post Arthrogram Hip

Coronal STIR Lg FOV

Coronal T1 Lg FOV
Ax T1 FS – Sm FOV
Cor T1 FS – Sm FOV
Sag T1 FS – Sm FOV
Cor PD FS - Sm FOV
Ax T2 Fs (TR 3000 to 4000, TE 40 to 50, echo train of 6 to 8) - Sm FOV

Pelvis/Hip

Cor Loc
Ax Loc
Shim
Map
Cor T1 Lg FOV
Cor STIR Lg FOV
Cor T2 Fs Affected (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6 to 8)
Ax T2 Fs Affected (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6 to 8)
Sag PD FS Affected
Axial T1 Affected

Knee

Cor Loc
3 Plane Loc
Shim
Ax PD Fs
Cor T1
Cor PD Fs
Cor T2 Fs
Sag PD FS SE (Spin Echo)
Sag PD Fs
Note: Facilites than can not do Spin Echo or if spin echo images are not satisfactory, then use Sag T2 Fs (TE 50-60)

Ankle

Cor Loc
3 Plane Loc
Shim
Cor PD Fs
Ax T1
Ax T2 Fs (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6 to 8)

Ax PD Fs
Sag STIR
Sag T1

Foot

ROUTINE
Note: Coronal of foot is same plane as axial of ankle.

Cor Loc
3 plane Loc
Shim
Cor T2 FS (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6 to 8)
Ax T2 FS (TR 3000 to 4000 msec, a TE 40 to 50 msec, and an echo train of 6 to 8)
Ax PD Fs
Ax T1
Sag STIR
Sag T1

If specifically evaluating for stress fracture, substitute for Cor PD Fs above:
Small FOV sequence from talonavicular joint to MTPs

Cor T1
Cor STIR