**SHOULD ER TCT/ Labral tear/ Instability/ Dislocation**

**MSK TIPS:**
- Ensure extremity of interest is as isocenter as possible.
- SHIM all fat sat scans!!
- Only use 4ch wrist on RP1 if additional coverage needed.
- Use Large FOV to find anatomy if you have issues with seeing all planes on your localizer. If you appear to be centered, but don’t get any sagittal images on your localizer, you are scanning wrap.

If Contrast needed: Multihance 1 mmol/kg Max 20 mL
Low eGFR inpatient Dose: No Change

**ELBOW OCD/ LOOSE BODY/DISTAL BICEPS & TRICEPS TEAR**

**MARK PAIN / ARM OVER HEAD**

1. 3 Pl loc
2. Ax T1 (approx. 32 slices) 3/1.5
   - GRx on Ax loc Cor Axial to humerus
   - Proximal 1/3 of humerus thru biceps tendon at radial tuberosity through pathology
3. Ax T2 cl fat
4. Sag T1 (approx. 16 slices) 3/1
   - GRx on Ax at distal humerus (see pic)
   - Center FOV on Joint
5. Sag T2 cl fat (Propeller)
6. Cor PD cl fat (approx. 24 slices)
   - GRx on Ax at distal humerus (see pic)
   - Center FOV on Joint
7. +C Ax T1 cl fat
8. +C Cor T1 cl fat

**Synovitis Give contrast & Omit**

- GRx on Ax at distal humerus (see pic)
- Center FOV on Joint
- Arm down at side: 4ch long bone
- 4ch Cardiac
- Small 16 flex

**HAND - FINGER - THUMB**

**MARK PAIN ARM OVER HEAD / HAND PRONE**

1. 3 Pl loc
2. Ax T1
3. Ax T2 dk fat
4. Cor T1
5. Sag T2 cl fat
6. Cor T1-For Finger or Thumb 2/0.2 OBL to ROI
7. Cor FSTIR
8. +C AxT1dk fat
9. +C Cor T1dk fat
10. +C SagT1dk fat

**Wrist Pain/Hand/Osteo/Tumor/Abscess**

**MARK PAIN ARM OVER HEAD**

1. 3 Pl loc
2. Ax T1 –Distal 1/4 of Forearm thru mid metacarp
3. Ax T2 cl fat (Metal: Ax T2 nodal)
4. Cor T1 Skin to Skin Center FOV on Carpals
5. Cor T2 cl fat (Metal: Cor STIR)
6. Sag T2 cl fat Skin to Center. Center FOV on Carpals

**PAIN:**
- 7. Oblique Ax PD dk fat Scapholunate ligament
- 8. Oblique Ax PD dk fat Lunotriquetral ligament

**FX:**
- 7. Oblique Sag T1 Long axis of scaphoid

**TUMOR - PRE AX T1 dk fat**

Osteo/Tumor/Abscess: Give contrast
- 7. +C Ax T1dk fat
- 8. +C Cor T1dk fat

**OSTEOMYELITIS/TUMOR/ABSCESS**

**MARK PAIN ARM OVER HEAD / HAND PRONE**

1. 3 Pl loc
2. Ax T1
3. Ax T2 dk fat
4. Sag T1 For Finger or Thumb 2/0.2 OBL to ROI
5. Sag T2 cl fat
6. Cor T1 For Finger or Thumb 2/0.2 OBL to ROI
7. Cor FSTIR
8. +C AxT1dk fat
9. +C Cor T1dk fat
10. +C SagT1dk fat

**SHOULDER:**

8ch Cardiac, 16ch Flex
Only use 30 small coil if protocol specifies
Large FOV. Use dedicated shoulder coil if looking a mass in joint
Increase FOV as needed
**MARKER at point of max pain or markers above and below area of pain**

1. 3 Pl loc
2. 2.3. Ax T1 & Ax T2 dk fat 3/1.5 GRx on Cor loc Ax to humerus
4. 5. Sag T1 & Sag T2 dk fat (Propeller) 3/1.5 GRx on Ax Sag to dist humerus
6. Cor T1 & Cor T2 dk fat 3/1.5 GRx on Ax Cor to dist humerus
7. For TUMOR—PRE AX T1 dk fat
8. +C AxT1dk fat
9. +C Sag T1dk fat
10. +C Cor T1dk fat

**HUMERUS OR FOREARM:**

16ch Flex, Long Bone, Cardiac

**MARKER at point of max pain or markers above and below area of pain**

**Try to get one slice down center of bone**

**If there is a small ROI (tumor, mass, or area of pain) OK to decrease FOV after large FOV COR STIR. Ensure to use thinnest Axial Slices (5/1) to insure area of interest is adequately covered. Call radiologist to check if questions.**

**IMAGES:**

1. 3 Pl loc
2. 2.3. Sag T1 & Sag STIR Humerus-4/2 Forearm-3/1.5
4. 5. Ax T1 & Ax T2 dk fat (upr and lwr) Humerus/Forearm-5/2.5
6. 7. Cor T1 & STIR. Humerus-4/2 Forearm-3/1.5
7. For TUMOR—PRE AX T1 dk fat (upr and lwr)
8. +C Sag T1 dk fat
9. +C Ax T1 dk fat (upr and lwr)
10. +C Cor T1 dk fat
SHOULDER SET UP:

**Back to Protocol**
Humerus Set up

Please keep in mind anatomical position when you scan patients. For humerus protocols you can use the biceps muscle and epicondyles as landmarks. Scan perpendicular or parallel to them for your sagittal or coronal planes.

Keep in mind to have one slice down the center of the humerus

ELBOW SET UP:

SAGITTAL

CORONAL
WRIST SET UP:

NOTE: Scaphoid is on the Thumb Side.

Scapholunate ligament
Parallel to proximal surface
of lunate & scaphoid

Lunotriquetral ligament
Parallel to proximal surface
of triquetrum & lunate

**Back to Protocol**
Hand/Finger/Thumb set up:

**Cover Pathology and area of pain**

- **finger pain**

- **Hand Pain**

**Cover All Side to side, run thin sequence if specific MC or MCP is in question**

**Cor Thumb:**

- **Cor Thumb: Parallel to Sesamoid Bones**

**SAG Thumb:**

**Back to Protocol**