



## Images to obtain during MSK arthrograms

- Shoulder
  - Pre-injection spot
    - AP of the shoulder in external rotation right before injection
  - Needle placement image once contrast is confirmed in joint
  - Post-injection
    - Internal rotation
    - External rotation
  
- Elbow
  - Pre-injection (full exposure – not spot)
    - AP fully extended
  - Needle placement image once contrast is confirmed in joint
  - Post-injection
    - AP fully extended
    - Lateral with elbow bent 90 degrees
  
- Wrist
  - Pre-injection (full exposure – not spot)
    - PA Wrist
  - During injection, obtain a live Fluoro loop of the contrast while it is being injected into the wrist. Save the loop. This is the most technically demanding arthrogram and the arthrogram when the Fluoro images are most likely to contribute to the diagnosis. If the Fluoro machine doesn't have loop save or 4x per second, then manual rapid fire during the injection.
  - Post-injection
    - \*\*Immediately after removing the needle, do not exercise, remove any wedge from underneath the wrist.
    - \*\* live Fluoro the wrist while the patient moves the wrist back and forth in the radial deviated and ulnar deviated positions two to three times. Then have the patient repeat this movement with a clinched fist. Save the Fluoro loops.
    - \*\*This process will greatly assist the Radiologists in diagnosing ligament tears by allowing them to see the contrast move throughout the carpal joint spaces, and through a possible tear during joint movement.

Fluoro Spot Images:

  - PA wrist with hand flat and fingers extended
  - PA wrist clenched fist view
  - PA wrist with radial deviation
  - PA wrist with ulnar deviation
  - Lateral wrist

- Hip
  - Pre-injection spot
    - AP with the foot internally rotated
  - Needle placement image once contrast is confirmed in joint
    - Post injection
      - AP with foot internally rotated
      - Frog leg lateral
  
- Knee
  - Pre-injection spot
    - AP with leg extended
  - Needle placement image once contrast is confirmed in joint
    - Post-injection
      - AP with leg extended
      - Lateral with leg extended
  
- Ankle
  - Pre-injection spots
    - AP with foot in neutral position (not flexed or extended)
    - Lateral in neutral position
  - Needle placement image once contrast is confirmed in joint
    - Post-injection
      - AP in neutral position
      - Lateral in neutral position
      - Oblique in neutral position