

Musculoskeletal Imaging and Intervention Section Imaging Procedures Triple Compartment Wrist Arthrography with Diluted Contrast Medium

PREREQUISITES

Preliminary plain films of the wrist, AP-lateral-obliques.

TECHNIQUE - Arthrography

- 1. 25G 5" needle.
- 2. Contrast: solution 1:5 contrast agent and 1% lidocaine, 1 mL diatrizoate sodium 300 mg iodine/mL and 4 mL and 1% lidocaine.
- 3. Injection: 3-5 mL.
- 4. Inject under direct fluoroscopic visualization with video recording or spot films.
- 5. Remove the needle. Patient actively flexes and extends wrist.
- 6. Obtain overhead films. AP-lateral-Obliques.

TECHNIQUE - Radiocarpal Joint

- 7. Inject the diluted contrast between the radius and the middle of the scaphoid (See Figures 1-3 below).
- 8. Follow steps 1-6.
- 9. Proceed to step 10.



Fig 1: Approach, AP.

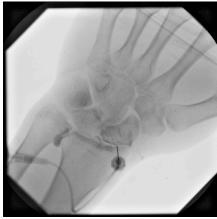


Fig 2: Contrast injection early, AP.



Fig 3: Contrast Injection late, AP.

TECHNIQUE - If TFC Tear

- 10. After 15 minutes inject full strength contrast agent into the mid-carpal joint.
- 11. Repeat steps 3-6.
- 12. STOP

TECHNIQUE - No TFC Tear

- 13. After 15 minutes inject full strength agent into the distal radio-ulnar joint.
- 14. Repeat steps 3-6.
- 15. Proceed to step 16.

TECHNIQUE - If No Leakage

- 16. Immediately inject full strength contrast agent into the mid-carpal joint.
- 17. Repeat steps 3-6.
- 18. STOP

TECHNIQUE - If Leakage

19. STOP

PATIENT POST ARTHROGRAPHY INSTRUCTIONS

Patient instructions are included in the "Post Arthrography Patient Instruction Sheet."