Distal Radius Fracture Non-Operative Rehabilitation Protocol

The goals of this protocol are to minimize post-op immobilization stiffness with maximizing digit and wrist ROM (especially supination), and improving grip strength.

PHASE I – IMMEDIATE POST-INJURY PHASE (WEEK 0-2):

- **Splint**
  - Patient to remain in post-reduction splint
- **Activity**
  - Patient to independently begin early finger range of motion and forearm rotation
  - Full elbow and shoulder motion in all planes to prevent joint stiffness
- **Medications:**
  - Short course of narcotic pain medication is prescribed (i.e. Oxycodone, Percocet, etc.)
  - OTC NSAIDS (ibuprofen, naproxen)
  - OTC Vitamin C (500mg for 50 days)
    - This has been shown to reduce the risk of Complex Regional Pain Syndrome (CRPS)
- No formal therapy needed until 6 weeks post op

PHASE II – IMMOBILIZATION PHASE (WEEK 3-5):

- Initial splint removed
- Patient to be fitted with a short arm cast
- Continue finger motion and forearm rotation
- Patients should be off of all narcotics at this time
- Patient education to include fracture precautions, anatomy, progression of bone healing, implications of immobilization.
  - Smoking cessation education as needed

PHASE III – EARLY REHABILITATION PHASE (WEEK 6-8):

- Cast removal and placement into a removable splint
- Begin formal physical therapy following cast removal, 2x per week
- Begin gentle active wrist range of motion
- Lifting restriction: 5lbs
- Continue finger motion
  - Include intrinsic stretches and home program
  - Thumb IP blocking exercises
- Continue forearm, elbow and shoulder range of motion as needed
- Edema reduction techniques including Isotoner glove, edema mobilization massage, Kinesiotape
- Monitor for signs of CRPS
  - If present, begin CRPS protocol to include desensitization

**PHASE IV – ADVANCED MOBILIZATION PHASE (WEEK 9-12):**
- Frequency of therapy 2-3x per week for range of motion as needed
- Wean from removable splint
- Begin passive wrist range of motion
- Begin strengthening as tolerated
- Lifting restriction: 10lbs
- At 10 weeks, initiate work conditioning for those with heavy manual labor occupations

**PHASE IV – RETURN TO ACTIVITY PHASE (WEEK 13+):**
- Frequency of therapy 1x per week as needed
- Continue advancement of strengthening
- Lifting restriction: advance as tolerated
- May begin impact loading
- Full functional use as tolerated
- Return to unrestricted activity with return to manual labor and sports as tolerated
- Full function after a wrist fracture usually takes at least 6 months and up to 2 years to achieve.
  - Emphasize to the patient the need to continue home exercises as well as the fact that they will continue to improve for quite some time.