



Orthopaedic Protocols

Distal Radius Fracture Colles' Fracture (Closed or Open Reduction)

Post-op Days 10-14:

- Therapy is begun while the patient is in the cast immobilization. The cast may be a short arm or long arm cast.
- Edema control is initiated with 1" Coban or fingersocks. Therapist should evaluate the cast to ensure it does not become too tight, nor that it restricts motion.
- Active & PROM exercises are initiated for the thumb, digits, & shoulder. With short term arm casts, elbow & forearm ROM is initiated. Exercises should be performed approx 6 times a day for 10 min. sessions.
- Dynamic flexion splinting may be added to the cast to increase MP & IP joint flexion as needed.

Post-op Week 6

- A well-molded wrist immobilization splint is fitted to wear between exercise sessions and at night.
- Edema control is continued following cast removal. Edema tends to increase slightly. Elastic stockinettes or light compressive dressings may be applied until the edema subsides. An edema glove (i.e isotoner glove) may be helpful for persistent edema in the digits or dorsum of the hand.
- AROM exercises are initiated to the forearm & wrist.
- NMES may be initiated to facilitate flexion of the digits.

Post-op Week 8

- Wearing time with the wrist immobilization splint is gradually decreased.
- PROM exercises are initiated to the wrist & forearm each hour for 10 min sessions. Surgeon must ensure the healing fracture can tolerate PROM & dynamic splinting.
- Dynamic splinting to the wrist &/or forearm may be initiated 4-6 times a day for 45 min sessions. It is not uncommon to initiate dynamic splinting to recapture wrist & forearm motion. Wrist immobilization splint may be discontinued so long as the patient is comfortable without the wrist support.
- Progressive strengthening may be initiated beginning with putty & a hand exerciser. 1-2# weights may be initiated for the wrist.

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Considerations:

- It is important to monitor for paresthesias in the hand secondary to casting. In case where the edema increases, the edema may cause pressure on the median nerve.
- It is important to monitor for the development of a reflex sympathetic dystrophy (RSD). The dystrophy may be secondary to the cast or dressing becoming too tight (secondary to heightened edema) or may simply be a sympathetic response secondary to the injury or surgery. Exercises should RSD develop, it is critical to establish a medical and therapeutic program to intervene with the RSD as quickly as possible.
- Extrinsic extensor tightness has been noted following distal radius fractures. This can be prevented or minimized by emphasizing composite flexion exercises early in therapy & throughout the treatment. Early in therapy, patients tend to flex at the IP joints but not at the MP joints.
- Patient with persistent pain & edema problems may benefit from a CPM unit while in the cast or following cast removal. This can be beneficial in decreasing the edema & assist in moderating the pain. A CPM unit can be considered for the wrist &/or forearm later in therapy to facilitate return of motion.
- Encourage the patient to perform shoulder, elbow & forearm exercises during & subsequent to the immobilization phase. Exercises should be performed 3-4 times a day to ensure secondary problems do not develop.
- TENS can be extremely helpful when pain does not subside post-op.
- As ROM exercises are initiated for the wrist, be sure the patient exercises the wrist while grasping an object. This will allow the patient to isolate the wrist extensors from the EDC.