Postoperative Care For Perilunate Dislocation Open Repair-- Dr. Trueblood

**Indications:** Perilunate dislocations are an uncommon but serious injury to the wrist, usually resulting from high energy injuries such as car crashes or industrial accidents. They always involve ligamentous injuries to the carpus, but may also include fractures of the scaphoid, capitate, hamate, or triquetrum. These are potentially crippling injuries if neglected. Fortunately, they are rarely missed either by patients or affiliated medical staff.

**Technique:** The wrist is exposed with a longitudinal, dorsal incision and the EPL is permanently transposed radially. The PIN is identified at the proximal extent of the dissection and excised to denervate the dorsal wrist capsule. The fourth dorsal compartment is mobilized ulnarly and a T-shaped capsulotomy is used to access the carpus. Fractures are reduced and fixed with headless, compression screws and the lunate is reduced to the scaphoid, capitate, and triquetrum. The proximal row is secured with buried k-wires and the intercarpal ligaments are repaired using suture anchors. The wound is irrigated and the dorsal capsule closed with interrupted suture. The retinaculum is then repaired with interrupted suture. The dorsal wound is closed in layers.

An extended carpal tunnel incision is then made volarly and the transverse carpal ligament is released longitudinally. Contents of the carpal tunnel are then retracted and any hematoma irrigated away. The volar capsule is inspected and the predictable, volar capsular rent is opened to expose the palmar lunotriquetral ligament. This is now repaired with a suture anchor and the capsule repaired with interrupted sutures. The wound is irrigated and closed in layers.

The wrist is placed in sterile dressings with a well-padded thumb spica splint in palmar abduction. The decision whether or not to discharge on the day of surgery depends on the patient’s pre and post-operative swelling, but most go home.

**Postoperative Precautions:**
- No lifting, pushing, or pulling.
- Splint stays clean, dry, and intact until pins are removed.
- No driving.

**1st postoperative visit at 2 weeks--**
- Wound assessment. Stitches out and steri-strips applied.
- Pain control. Refill pain meds as needed.
- Therapy note for AROM/ PROM of digits and edema control if unable to make a full, composite fist. Desensitization exercises if needed.
- Schedule follow-up for 8 weeks after surgery.
Work note: no lifting, pushing, or pulling. May type and write. Non-weight bearing to operative extremity. No driving.

Expected Return to Work:
- Cognitive/ sedentary: 2 weeks
- Medium duty: 12 weeks
- Heavy labor: 4 months.

2nd follow up at 8 weeks after surgery--
- Wound check.
- Pain control. Refill pain meds as needed.
- Consent for removal of retained pins in the operating room at 10 weeks after surgery.
- Schedule follow-up for 12 weeks after surgery.
- Work note: no lifting, pushing, or pulling. May type and write. Non-weight bearing to operative extremity. No driving.
- Expected Return to Work:
  - Cognitive/ sedentary: 2 weeks
  - Medium duty: 12 weeks
  - Heavy labor: 4 months.

Remove Pins in operating room 10 weeks after surgery.
- Refill pain medication-- patient will likely need some during hand therapy.
- Therapy prescription (2-3x/ week x 4 weeks)
  - Splinting: off the shelf wrist splint. May wean from splint as tolerated.
  - ROM:
    - AROM/ PROM of elbow, wrist, and hand.
  - Strengthening:
    - Grip, wrist, and forearm as soon as the patient can move with good mechanics through the stressed range of motion.
- Modalities
- HEP
- Follow up in office in 2 weeks.

Follow-up visit at 12 weeks after index surgery.
- Pain control assessment. Refill pain meds if needed.
- Therapy note
- Work note: 20# weight lifting for repetitions. 50# maximum. May drive.
- Return to office in one month.
Therapy:
1-2 x/week x 4 weeks.

- AROM/PROM
  - May add static progressive splint in direction of maximum limitation if arc of motion <30 degrees flexion - 30 degrees extension.

- Strengthening:
  - Patients with unusually rigorous work demands (construction/ heavy industry) may benefit from work conditioning. When an appropriate patient’s strength is at least 80% of the contralateral side’s and motion mechanics are smooth, please contact Leslie Hedge at 388-3026 for a referral to work conditioning.

- Modalities
- HEP

Office visit at 16 weeks after surgery--

- Functional assessment. DASH score
- Assess ROM. If arc of motion is less than 50/50, then continue therapy and/or static progressive splinting.
- Work note: Most patients can return to work at this time without limitations.