

Dr Neeley Olecranon ORIF Protocol

Phase I (0-4 weeks): Period of protection: splint/brace should be worn at all times during this phase (except for hygiene and PT). No active elbow extension. Therapists may slowly advance elbow flexion (and corresponding brace setting) within a tension-free zone. D/C brace after 4 weeks.

- Weeks 0-1: No formal PT. Splint without motion:
 - Splint/brace used to immobilize elbow at roughly 45 degrees.
 - Home exercises only (gentle wrist and shoulder ROM).
- Weeks 1-6: Begin formal PT. Brace with careful progressive motion:
 - Brace unlocked to allow ROM from full extension to ___ degrees of flexion. Flexion setting may be increased weekly (ie. roughly 10° per week) to match whatever passive, tension-free extension is achieved during therapy sessions (see below). Brace should be worn at all times (except for hygiene or PT).
 - ROM: Flexion: active and gentle passive elbow flexion to ___ degrees, advancing as tolerated to a tension free endpoint. Therapists may slowly increase the flexion block setting on the brace to match the tension-free flexion achieved during therapy sessions (ie. if elbow can be passively flexed to 70° without tension, brace may be reset to 70° flexion block after that therapy session). Extension: passive-only extension to tolerance (NO active extension). Passive forearm supination/pronation. Continue shoulder/ wrist ROM. Goal: full elbow extension, tension-free flexion to 120°, and full forearm supination/pronation by 6 weeks.
 - Strengthening: Cuff/periscapular/forearm isometrics in brace, within above motion limits.

Phase II (6-12 weeks): Motion is more aggressively advanced. Still no resisted elbow extension or lifting with the operative arm.

- Discontinue brace.
- ROM: Advance active and passive elbow flexion to full (if not already achieved). Gentle passive stretching at end-ranges as tolerated. Begin gentle active elbow extension (gravity only). Continue forearm supination/ pronation, shoulder and wrist ROM. Goal: full, tension-free elbow and forearm motion by 9 weeks.
- Strengthening:
 - Avoid resisted elbow extension until 3 months post-op.
 - Progress cuff/periscapular and forearm isometrics g bands. Only do 3x/week to avoid cuff tendonitis.
 - Modalities as per PT discretion

Phase III (3-6 months): Begin resisted elbow extension and progress to sport/occupation-specific rehab.

- ROM: Unrestricted active and passive stretching at end ranges as tolerated.
- Strengthening/Activities:
 - Continue bands, progressing to light weights (1-5 lbs), 3x/week.
 - Begin gentle resisted elbow extension and transition to closed chain upper extremity/forearm strengthening within pain-free limits.