

Total Elbow Replacement Rehabilitation Protocol

This rehabilitation protocol serves as only a general information guideline for patients and may be individually modified by the surgeon depending on the preoperative degree of deformity, health of the patient and their tissues as well as the presence of postoperative complications. Functional Range of Motion of the elbow is usually defined as 30-130 degrees of flexion and 60 degrees each of pronation and supination.

Phase I:

Goals:

- Allow healing of tissues.
- Gradually restore active range of motion (AROM) of the cervical spine, shoulder, wrist and fingers.
- Reduce swelling.
- Regain independence with Activities of Daily Living (ADL's)

Phase I Precautions:

- No lifting more than a "pen or a teacup" with the operative hand.
- No upper extremity weight-bearing on the operative side.
- May wash the incision with soap and water 1 day after the staples are removed. No soaking in a tub however. No use of antibacterial ointments etc. Cover the incision with a sterile gauze dressing daily and as needed until there is no drainage whatsoever.

Early Phase I Exercises (Postoperative Day 7-14)

- Out of sling/elbow splint as tolerated.
- Early active assisted range of motion (AAROM) for flexion and extension of the elbow with the upper arm held next to your side (adducted).
- Gentle AAROM for pronation and supination with the elbow held next to the side and at 90 degrees of elbow flexion to minimize strain on the ligaments.
- Gravity assisted elbow extension (the above exercises can be performed for 5 minutes/ 5x per day or even 1 minute every hour while awake.)

Late Phase I (week 2 through week 6)

- A splint or a sling may only be worn at night at this point.

- Continue with the previous active-assisted motion exercises (AAROM) and now gradually start independent AROM (active range of motion) according to the discretion of the surgeon.
- Continue cryotherapy, edema/swelling management, arm elevation above level of the heart and active flexion and extension of fingers and hand at least 1 minute every hour while awake. Can use a stress ball/sponge in the operative hand.
- 2 weeks after the staples are removed and if there is no active drainage from the incision, then start vigorous scar massage with any moisturizer (CeraVe, Vaseline intensive care, Vitamin E ointment etc) 2x/day for up to 1 year to help soften the scar and mobilize underlying tissues.

Phase II :

Early Phase (Week 6 through Week 12):

- No upper extremity weight-bearing or pushing off with the operative arm.
- No lifting more than 5 lbs total (lifetime lifting restriction with a total elbow replacement).
- Continue AROM and AAROM.
- At week 10-12 can start sub maximal pain free shoulder/elbow/wrist isotonic strengthening (no weights or resistance greater than 5 lbs)
- If patient has not achieved elbow motion of at least 120 degrees of flexion then consider a static progressive splint.

Late Phase II (Week 12 postoperatively and onward):

- Progress to a Home Exercise Program focused on maintaining a pain free functional arc of elbow motion.
- Upon discharge from supervised therapy continue to perform self-directed stretching for AROM and AAROM frequently throughout the day (5 minutes 5x/day or 1 minute every hour while awake) and perform the isotonic strengthening 2-3 days per week. For up to 2 years postop.
- No lifting more than 5 lbs for life. No tennis or impact/sudden uncontrolled jerky lifting movements (ie pulling weeds/roots out of garden etc.) and no throwing activities for life