

# Distal Humerus Post-Operative Protocol

**0-2 Weeks:** Maintain elbow splint for 1-2 weeks while your incision heals. Continue to elevate the extremity and use ice for 20 minutes per hour to help decrease swelling. Expect swelling to increase in your hand and it is important to begin finger exercises to decrease swelling and to help prevent finger stiffness. Passive Exercises are provided below:

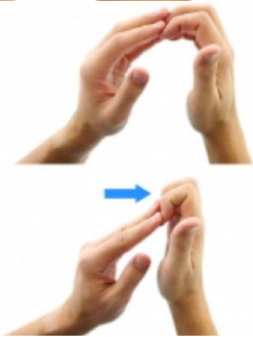
Use your uninjured hand to help push the big knuckles down and the tips of the fingers in toward the palm. If all fingers are stiff, do each individually.

*Hold 30 seconds. Repeat 4 times to each stiff finger.  
Do 3 times a day.*




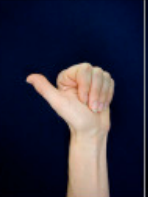



Use your non injured hand to push the affected finger(s) in and back so that only the top two joints bend.

*Hold 30 seconds. Repeat 4 times. Do 3 times a day.*

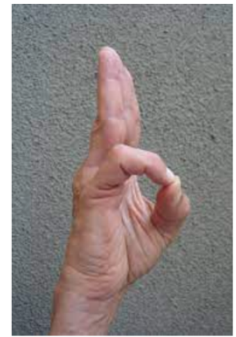


Active Exercises are provided below:

Exercise	1	2	3	4	5
Position					
Advice to patient	Straighten your fingers.  Keep your wrist straight.	Curl your fingers into a 'hook' fist.  Keep your wrist straight.	Make a full fist.  Keep your wrist straight.	Make a fist, but keep the tips of each finger straight.  Also keep your wrist straight.	Bend your knuckles into a 'table top' position.  Keep your wrist straight.

Sourced from: Miller, Lauren, et al. "No difference between two types of exercise after proximal phalangeal fracture fixation: a randomised trial." *Journal of Physiotherapy* 62.1 (2016): 12-19.

**Thumb range of motion exercises:** Minimum three times per day. You may use your other hand to assist. Begin by touching your thumb to the tip of your pointer finger, then middle, ring, and small finger. Once you can touch the tip of your small finger slide the thumb down the finger towards the palm as far as you can. Hold the stretch for 30 seconds and then release.



Active thumb touches

**1-2 Weeks:** Your elbow splint will now be changed to a range of motion elbow brace.. Now, elbow range of motion should be performed at minimum 4-5 times per day.

Safety precautions while exercising:

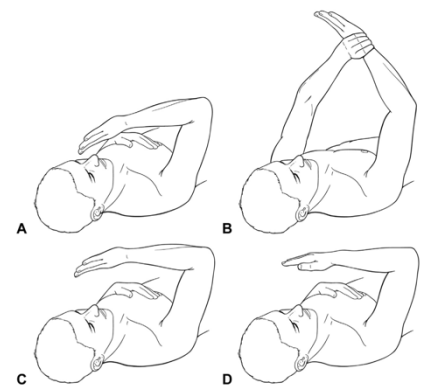
- [ ] If your ulna was fixed, **ONLY PASSIVE** elbow extension for the first 6 weeks. Which means that you should use your other arm to move your operative elbow during extension exercises (exercises that straighten your elbow) as shown above. Initiate **ACTIVE** and **ACTIVE ASSISTED** elbow flexion.
- [ ] If your ulna was not fixed, **ACTIVE** and **ACTIVE ASSISTED** elbow range of motion is preferred. Meaning you should use the muscles of the arm to complete your rehabilitation.

It may also feel more comfortable to begin exercises when lying on your back which will allow gravity to assist in flexing your elbow as shown below. **You can use your other arm to help straighten your elbow when performing these exercises.**

STEP 1

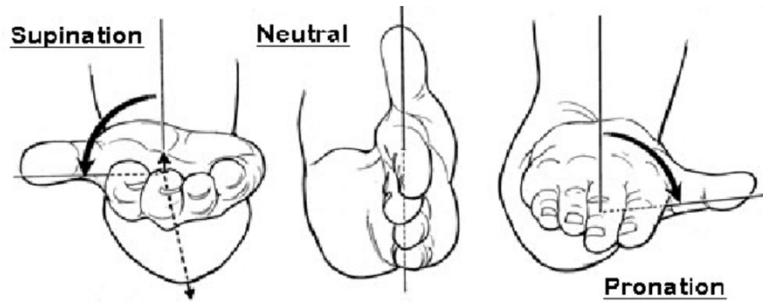


STEP 2



**FIGURE 1:** Overhead motion exercises. The patient is positioned supine with the shoulder flexed, adducted, and in a neutral to external rotation position, thereby eliminating gravitational varus and distraction forces. In this position, **A** elbow flexion, **B** extension, **C** pronation, and **D** supination motion exercises are performed.

Rotation of the arm may be performed with the elbow in a **maximally flexed position**.



The red tab at the top can be engaged in the locked position at 60-80 degrees for comfort but is not required. The tabs on either side of the dial may be adjusted to allow further motion of the elbow in accordance with the stage of rehab.



**4-6 Weeks:** Fully unlock tabs to allow full elbow range of motion, without restrictions. Continue elbow range of motion exercises, may at this point begin passive range of motion exercises assisted by a therapist or your other arm.

**6-8 Weeks:** Progressive discontinuation of brace. 5 lb lifting restriction.

If at this stage elbow ROM stalls for two consecutive weeks, static versus dynamic progressive splinting may be employed per physical therapy team.

**8-12 Weeks:** 10 lb lifting restriction

**12+ Weeks:** No formal restrictions, return to activities as tolerated