

FLEXOR TENDON PROTOCOL ZONE 1-2

Early active motion protocol

This protocol should only be used if the following has occurred with surgery and as a result of surgery.

1. 4, 6, or 8 strand repair was completed with peripheral running suture.
2. There is minimal edema.
3. Patient has full passive flexion.
4. Patient needs to be off of all pain meds before starting active movement protocol.
5. Only initiate protocol if pt is seen 3-5 days post operatively.

Day 3-5 post-op

1. Patient is provided with a dorsal blocking orthosis for the forearm, wrist and hand with the following:
 - Wrist in 0-20 degrees of extension, MP joint flexion-30-45 degrees of flexion. IP joints at 0 degrees.
 - Soft strap at ends of fingers to hold them in extension in splint can be used but should be loose. The strap will help to prevent the fingers from getting caught and pulled. If it is tight the patient may try to bend the finger (s) against the strap and put tension on the repair.
2. Orthosis is worn at all times (even with showering) with removal only in therapy.
3. PROM for all digits for flexion. This is to be done before any active motion.
4. Active extension of fingers within the limits of the orthosis (negative 30-45 degrees). Make sure the IP joints maintain full extension.
5. Edema control- elevation, gentle finger compression wraps, retrograde massage if you can (maybe to other fingers).

Day 3-7 through week 2 post-op

1. Continue with PROM of all digits for flexion. Passive extension of IP joints if needed within the limits of the orthosis. Do this as a warm up before any active motion.
2. Active IP extension within the confines of the orthosis.
3. Edema control-elevation, gentle finger compression wraps, retrograde massage if you can (maybe to other fingers).
4. Initiate short arc active motion: Start by have patient very gently actively make a 1/4-1/2 fist or what they can do comfortably. Be careful with verbal cueing to "Pull, Pull, Pull" as this may cause them to pull to hard.
5. Place and Hold: LIGHTLY hold fist in 1/2 position, have patient hold-never do forceful place and hold.
6. HEP-Move it or lose it. Active motion should be done 7-8 times per day but gently within the splint

Week 2 post-op

1. Continue with above.
2. Make sure to do PROM before doing any active motion.
3. Continue with short arc active motion but increase to ½-3/4 fist if patient is able to comfortably. Be careful with verbal cueing to “Pull, Pull, Pull” as this may cause them to pull too hard.
4. Continue with active IP extension within confines of orthosis.
5. Initiate scar massage when the stitches have been removed and the incision is fully healed.
6. In therapy only. Therapist can work on passive MP extension while holding the IP’s flexed. Done gently. Keep wrist in neutral.

Week 3-6 post-op

1. Continue as above.
2. Continue actively making a “light” fist. Trying to get full fist by 6 weeks post op.
3. If PIP joint flexion contractures are noted, then initiate appropriate finger orthosis for them to work on extension.

Week 4- 6 weeks post-op

1. Depending on patient may be able to use fingers for light activities in therapy. This would be indicated if patient is behind in the protocol and has a lot of scar tissue and limited motion. If they have a full active fist do not initiate this.
2. Can initiate full extension of MP and IP joints compositely, but make sure wrist is kept in neutral.

Week 6 post-op

1. All orthotics can be discontinued. Can continue with PIP extension orthosis if needed.
2. Can initiate gentle blocking exercises. Although if patient has full active motion you will want to wait until 8 weeks post op. Never do blocking exercises to the 5th digit**.
3. Can work on full composite extension (fingers and wrist).
4. Patient can use hand for light ADL activities.

Week 8 post-op

1. Initiate gentle strengthening as needed.
2. Patient can use hand for light work activities.

Week 12 post-op

1. No restrictions. Patient can use hand for all activities.

** Never do blocking exercises on a 5th digit repair or tenolysis. The tendon is smaller in diameter, A2 pulley is shorter by 3-4 mm, FDS is gone in 8-20% of population.