
Flexor Tendon Repair Guidelines

Zones 1-3

Services generally start between 2 to 5 days post surgery unless there has been a digital nerve injury. If a digital nerve is injured then they are not seen until 3-4 weeks post op.

Days 2-5 post op

1. Dorsal protective splint provided. Patients hand must be kept into this flexed position while the splint is being fabricated and changing dressings.
 - a. Wrist in 30-40 degrees of flexion
 - b. MP joints at 60 degrees of flexion
 - c. IP joints at 0 degrees of extension
 - d. Finger is held in flexion with rubber band traction. This needs to be loose enough to allow full extension of IP joint but keep the IP joints flexed at rest.
 - e. This splint is worn at all times and even to bed. **Do not provide a Velcro strap to hold finger into splint at night.**
 - f. Do not provide any type of stockinette for comfort or perspiration. It is difficult to get these on and off and it makes the splint slide.

2. Active extension is initiated with the rubber band traction. The rubber band then pulls the finger back into flexion after the patient actively extends. If the rubber band is a little too tight to allow full extension then the patient can lift up on the rubber band to give it slack, however, the rubber band must pull them into flexion. This is completed 10 times every hour. If patient is not able to obtain full extension then an MP blocking bar must be added. This can be done simply with an aluma-foam splint. The purpose is to hold the MP joints in a more flexed position so the IP's are moved away from splint and there is more room for extension.

3. Passive flexion is completed with all digits 4-5 times per day. Patient does this with splint on. Individual joint flexion along with composite flexion should be completed.

Note: IF repair is to the FPL, splint is as follows

1. Wrist at 20 degrees of flexion
2. MP joint at 15 degrees of flexion
3. IP joint at 15 degrees of flexion

Week 1-2 post op

1. Continue with active extension and PROM for flexion.
2. Make sure the PIP joints are extending fully

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3. Initiate scar massage if wounds are closed and stitches removed.
 4. Edema management as able. Again, use caution. Coban for some individuals may limit healing and tendon gliding depending on extent of damage done. Also, they need to be able to maintain the flexed position when it is put on and off.

Week 3-4 post op

1. If greater than a 20 degree extension lag is noted in the PIP joint then an aluma-foam splint needs to be fabricated to be used with the dorsal protective splint. A Velcro strap can be used to passively pull the PIP joint into extension. This should be done 4-5 times per day.
2. Initiate "Place and Hold" exercises. Can do in full flexion, mid flexion and slight flexion.

Week 4 post op

1. **Evaluate** if tendon glides easily. IF it does, then the tendon needs to be protected until 6 weeks post op. If tendon glide is minimal then the splint can be discharged at 4 weeks and a wristlet needs to be provided. See below for wristlet info.
2. Continue as above.

Week 6 post op

1. Splint can be discharged.
2. Wristlet is provided. This is a soft strap that is around the wrist. The finger is still held in flexion with the rubber band traction. Again, the elastic needs to be loose enough to allow full extension with wrist in neutral but then pull the finger back to flexion.
3. Continue with the passive flexion and the finger extension 4-5 times per day with wrist in neutral.
4. Initiate active wrist flexion and extension with the fingers passively held in flexion.
5. Initiate **Tendon Blocking Exercises****
6. Initiate **Active Tendon gliding exercises**. Three fist position. Complete 3-4 times per day. Do each 10 times.
7. Do not want to do any composite wrist and finger extension at this time.

Week 7-8 post op

1. Discharge all splints
2. Continue with corrective splinting if extension is not full motion
3. Continue with scar management-can initiate ultrasound (3mhz/.4 w/cm squared)if excessive scarring and limited pull through of tendon is noted.
4. Continue with A/PROM as noted above.

5. If there is excessive scarring then you can initiate some strengthening with soft putty. Can do pinch and grip as well as flexion and extension exercises. If good active motion is noted then should wait till 12 weeks post op to start any resistive activities.

6. IF allowed by MD can use hand for light ADL activities.

Week 12 post op

1. No more precautions. Can use hand for any activities

2. Can now measure grip and pinch.

**If superficialis pull through is restricted you can cast/splint to immobilize the DIP joint in extension to allow forces to go to PIP joint