

Flexor Tendon Repair Zones I, II, III Rehabilitation Protocol

Kelly Holtkamp, M.D.

Please fax initial evaluation and progress notes to 815-381-7498.

1-3 Days Postoperative

- Do not remove surgical bandage.
- Restrictions: No heavy lifting greater than 0 lbs.

3-5 Days Postoperative

- The therapist will remove the surgical bandage.
- The therapist will fabricate a dorsal blocking orthosis with the wrist in 30 degrees of flexion, MP joints in 70 degrees of flexion, and IP joints in neutral position.
- The orthosis is to be worn at all times. The orthosis may be removed for hygiene purposes and to perform the exercise program.
- The therapist will instruct proper skin care to prevent skin breakdown. The skin should be completely dry before re-applying the orthosis.
- Instruct the patient to begin passive range of motion exercises to each digit within the limitations of the dorsal blocking orthosis. Each exercise should be performed for 25 repetitions every 2 hours while awake.
- Instruct the patient to perform passive place-and-hold exercises out of the orthosis. Passively extend the wrist into extension and passively flex the digits. Instruct the patient to actively hold the fist for 5 seconds while in wrist extension. Allow patient to relax and let the wrist drop into flexion. Each exercise should be performed for 10 repetitions every 2 hours while awake.
- Educate the patient on anti-edema management. This includes, but not limited to, self-retrograde massage, cold therapy, and extremity elevation. The anti-edema management will continue for several weeks.

10-14 Days Postoperative

- The sutures are removed at Dr. Holtkamp's office.

3 Weeks Postoperative

- The therapist will begin scar tissue management to decrease sensitivity and density, which could include ultrasound and/or silicone gel pads per therapist discretion. The scar tissue management will continue for several weeks.

4 Weeks Postoperative

- Instruct the patient to begin active range of motion exercises to the wrist and digits.
- The following exercises are included in the plan of care. Additional exercises may be necessary per the therapist's discretion.

- Place and hold exercises.
- Active flexion of the digits followed by extension of the digits.
- Active hook fist.
- Active fist followed by hook fist.
- Active fist followed by wrist extension and digit extension.

6 Weeks Postoperative

- The dorsal blocking orthosis should be gradually reduced 1-2 hours each day. It is expected that the patient is completely out of the orthosis within 7-10 days.
- Instruct the patient to begin DIP and PIP joint blocking exercises to the digits. Each exercise should be performed for 10-15 repetitions every 2 hours while awake.

8 Weeks Postoperative

- Instruct the patient to begin a progressive strengthening exercise program.
- Restrictions: The patient is allowed to begin light (2 lbs.) lifting and pulling. The weight can be increased as tolerated depending on the patient's strength and comfort. Avoid maximal effort during sustained composite gripping.

12 Weeks Postoperative

- The patient may resume light-medium activities of daily living.
- Restrictions: The patient is allowed to begin medium (20 lbs.) lifting and pulling. The weight can be increased as tolerated depending on the patient's strength and comfort. Avoid maximal effort during sustained composite gripping.

14 Weeks Postoperative

- Instruct the patient to continue their home exercise program for range of motion and strengthening.
- If the patient has not achieved functional range of motion and strength, then continue with occupational therapy for an additional 2-4 weeks.

16 Weeks Postoperative

- The patient may resume all activities of daily living. The patient is allowed to perform heavy lifting and maximal sustained composite gripping.
- Work status: The patient is allowed to return to full duty status if the job requirements have been met. If not met, then a functional capacity evaluation and work hardening program may be recommended.
- The healing process can take up to a full year. Therefore, it is advised to continue with the home exercise program until goals have been met.