

Extensor Tendon Repair Zones II, III, IV Rehabilitation Protocol

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

1-3 Days Postoperative

- Do not remove the surgical bandage.
- Restrictions: No heavy lifting or pulling greater than 0 lbs.
- The patient is to begin active and passive range of motion of the uninvolved fingers and thumb to prevent stiffness and reduce swelling.

3-5 Days Postoperative

- The therapist will remove the surgical bandage.
- The therapist will fabricate an orthosis to protect the repair. If the lateral bands were repaired, fabricate a volar-based finger gutter orthosis positioning the PIP and DIP joints in full extension. If the lateral bands are normal, fabricate a volar-based finger gutter orthosis positioning the PIP joint in full extension and DIP joint free.
- A lateral view x-ray is required to confirm proper position of the PIP joint. A lateral view x-ray is required for each orthosis fabricated.
- 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 active range of motion exercises of the MCP and DIP joints. For the MCP joint, keep the IP joints in full extension. For the DIP joint, block the PIP joint in full extension. Each exercise should be performed for 25 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 with emphasis on blocking to the PIP and DIP joints, composite range of motion exercises, and isolated IP extension with the MP joint blocked in flexion. Each exercise should be performed for 25 repetitions every 2 hours while awake.
- The extension gutter orthosis is continued between exercise sessions and when sleeping.

6 Weeks Postoperative

- Instruct the patient to begin passive range of motion exercises to the digit assuming the extensor lag is less than 10 degrees. If there is an extensor lag greater than 10 degrees, then wait an additional 2 weeks before beginning passive range of motion.
- If there are no signs of an extensor lag, then the wearing time in the extension gutter orthosis is gradually reduced. The wearing time should be gradually reduced 1-2 hours each day. It is expected that the patient is completely out of the orthosis within 10-14 days.
- If an extensor lag is present and passively correctable, continue the extension gutter orthosis for 8-12 hours per day (i.e. sleeping, downtime). For some patients, the length of time in the orthosis may take up to 6 months or longer.
- If an extensor lag is present and NOT passively correctable, then the therapist will fabricate a dynamic extension splint.

7 Weeks Postoperative

- If there is decreased MP joint active flexion, the therapist may fabricate a dynamic flexion orthosis to increase the range of motion. It is important to watch for the development of an extensor lag and reduce the dynamic orthosis if an extensor lag develops.

8 Weeks Postoperative

- Instruct the patient to begin passive range of motion exercises to the digit if this has not already been done at 6 weeks postoperatively.
- Instruct the patient to begin a progressive strengthening exercise program.

10 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.

12 Weeks Postoperative

- The patient may resume activities of daily living as tolerated.
- 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.