



ORTHOPEDICS &  
SPORTS MEDICINE  
BAYCARE CLINIC®

**Dr. Klika & Dr. Kirkpatrick**  
**Flexor Pollicus Longus (FPL) Repair**

**Phase 1 – Maximum Protection 3 – 14 days**

**Goals for phase 1**

- Immobilize and protect repair
- Initiate ROM while protecting repair
- Minimize risk of scar adhesions
- Pain and edema control

**Other considerations**

Dressings to be removed for ROM exercises to ensure tight composite passive flexion to maximize tendon excursion

**Splint**

Dorsal thumb blocking splint is fitted for continual wear in the following position:

- Wrist neutral, thumb MP: 15° flexion, thumb IP : 30° flexion, thumb CMC joint: palmar abduction, digits free

**PROM**

The following PROM exercises to be performed every two hours within the constraints of the splint, 25 repetitions each:

- Passive thumb MP flexion, active extension to splint
- Passive thumb IP flexion, active extension to splint
- Passive composite thumb flexion, active extension to splint
- Passive wrist flexion (the wrist is passively flexed forward out of the splint), active wrist extension to splint

**Edema Management**

- Light compression with coban or compression sleeves to thumb, hand and forearm as needed
- Elevation
- Manual Edema Mobilization (MEM)

**Wound Care**

- Educate patient in dressing changes



## Phase 2 –Protect Repair with Controlled ROM 2 - 6 weeks

### Goals for phase 2

- Continue to protect healing repair while achieving adequate tendon excursion to prevent scar adhesions
- Continue scar and edema control
- Progress to full controlled active and passive ROM

### Other Considerations

- In phase 2, thumb AROM exercises are initiated with the exception of thumb IP blocking exercises which should not be initiated until week 6

### Splint

- Continue dorsal blocking splint between exercise sessions and at night

### ROM

- Continue Phase 1 Exercises
- 2 weeks - If passive motion is good and edema is well controlled, add place and hold composite thumb flexion for gentle tension
- 4 weeks – Begin AROM exercises within the constraints of the splint
  - thumb MP flexion/extension
  - composite MP and IP flexion/extension
  - thumb opposition
  - CMC palmar abduction/adduction
  - wrist flexion/extension
- 4½ weeks – dorsal blocking splint may be removed for active thumb ROM exercises allowing full composite wrist and thumb flexion/extension

### Scar Management

- After 2 days of suture removal, initiate scar mobilization
- Apply scar remodeling products as needed

### Continue phase 1 edema management



## Phase 3 –Maximize Range of Motion and Progress to Strengthening

### 6 - 12 weeks

#### Goals for phase

- Restore full range of motion
- Progress to strengthening and return to ADL and work activities

#### Other considerations

Educate patient that a tight sustained pinch with or without resistance greatly increases risk of tendon rupture. The patient should be using the hand for light activity only at home until 10 weeks.

#### Splint

- Discontinue dorsal blocking splint
- May fabricate thumb extension splint for night wear to increase thumb extension

#### ROM

- Begin unrestricted active and passive ROM of the thumb
- Initiate thumb IP joint blocking exercises

#### Modalities

- If needed, NMES may be added to enhance tendon excursion
- Apply ultrasound as needed for dense scar and/or limited tendon excursion

#### Strengthening

- 8 -10weeks – Begin strengthening
- 10 -12 weeks - with MD consent a comprehensive work conditioning program for patients with high demand / heavy manual labor occupations may be appropriate

#### Functional Activity

- 8 -10 weeks – gradually return to functional use of the involved hand for higher level work and home management tasks
- 10-12 weeks – patient may return to unrestricted use of the hand with MD permission

#### References:

Cannon, Nancy M. et. al. Diagnosis and Treatment Manual for Physicians and Therapists, 5<sup>th</sup> Ed. The Hand Rehabilitation Center of Indiana. Indianapolis, Indiana. 2021.

Skirven ,T. M.,Ostermans, A. L., Fedorczyk, J . M., & Amadio, P. C. (2011). *Rehabilitation of the Hand and Upper Extremity* (Vol. 1 ). Philadelphia, PA: Elsevier.

This protocol was reviewed and updated by Brian Klika, MD, Lacey Jandrin, PA, Andrew Kirkpatrick, MD, Tiffany Terp, PA and the Hand Therapy Committee 8/9/2021.