

## Flexor Tendon Repair Rehab Protocols

### Dr. Nielsen

#### Zones 1, 2 & 3

##### Early Active Range of Motion Protocol

- Surgery until 4-5 days post-op
  - No motion
  - Elevation in splint
- 4-5 days post op to 2 weeks
  - Dorsal blocking splint
    - Wrist neutral extension
    - MCP flexed 30 degrees
    - PIP and DIP joints full extension
  - Edema control
    - Gentle Coban wrap
    - Continue elevation as much possible
  - ROM
    - Warm up with passive flexion to half-fist, active extension within splint
    - Active extension with MP blocked in flexion to avoid IP flexion contractures
    - Active flexion up to half-fist in splint, attempting to initiate at DIP joint
    - Perform exercises for 10 reps every hour during day
- 2 to 4 weeks
  - Dorsal blocking splint shortened to Manchester style
    - Allows full wrist flexion and extension to about 45 degrees
  - Edema control as needed
  - ROM
    - Same exercises as initially with passive warm-up, active extension and half-fist active flexion
    - Add synergistic motion in splint: active wrist flexion during active finger extension then active wrist extension during active flexion initiated at DIP
      - Splint still blocks extension beyond 45 degrees at wrist
    - Perform exercises for 10 reps every hour during day
- 4-5 weeks
  - Splint remains same
  - ROM: same exercises but increase toward three-quarter fist by week 5
- 5-6 weeks
  - Splint remains same between exercises
  - ROM
    - Same exercises but increase toward a full composite fist
    - May perform exercises as above out of dorsal blocking splint
- 6-8 weeks
  - Discontinue dorsal blocking splint
    - May start extension splinting or relative motion flexion splints for IP contractures
  - Passive extension allowed to regain full motion
  - May target specific joints with blocking as necessary

- Light functional activity
  - 5 pound limit and no heavy gripping or jerking activities
- 8-12 weeks
  - Start strengthening as necessary
  - Aggressive ROM
- 12+ weeks
  - No restrictions on use

#### Thumb FPL Early Active Range of Motion

- Similar rehab protocol as above with following changes:
  - Gentle lateral pinch replaces half-fist (thumb gently touches lateral aspect of index finger without pinching against it)
  - Dorsal block splint has MCP flexed 30 degrees, IP full extension, wrist neutral
    - Do not shorten splint to Manchester for FPL, keep the forearm-based splint until 6 weeks

#### Early Passive Mobilization

- See Indiana Hand Manual 4e, pages 93-94

#### Delayed Mobilization

- See Indiana Hand Manual 4e page 97

#### Zone 4 and 5

- See Indiana Hand Manual 4e, pages 98-99

Early Active ROM Protocol is based on Saint James Flexor Tendon Rehab Protocol

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5142498/#!po=62.5000>