



Dr. Klika & Dr. Kirkpatrick
Extensor Tendon Repair Zones 2-4
Central Slip and Lateral Band Repair

Phase 1 – Maximum Protection 3 days - 6 weeks

Goals for phase 1

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

Other considerations

- Dressings to be removed for ROM exercises to ensure full motion during short arc motion exercises
- Patients with longitudinal extensor tendon repairs can begin AROM upon suture removal but the digit gutter splint is recommended between exercise sessions and at night as with other protocols

Splint

- Finger gutter splint with DIP and PIP in full extension to be worn at all times

Edema Management

- Light compression with Coban, elevation and Manual Edema Mobilization (MEM) as needed

Wound Care

- Educate patient in dressing changes

Scar Management

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

ROM

Central Slip Repair

- Week 4: Initiate AROM with emphasis on blocked PIP and DIP motion, composite ROM, and reverse blocking to isolate active extension of the PIP joint

Lateral Band Repair

- Week 3: Initiate unrestricted AROM exercises but continue digit gutter splint between exercise sessions and at night
- Week 4: Initiate AAROM if there are ROM deficits
- Week 5: PROM may be initiated as long as there is no extensor lag present, and patient may begin weaning from gutter splint during the day however splint should be worn with lifting activities and at night



Phase 2 –Maximize Active Range of Motion 6-8 weeks

Goals for phase

- Restore full active range of motion while protecting the healing repair
- Prevent and reduce extensor lags if present

Other considerations

- For patients who are older or form dense scars, it may be necessary to decrease splint wearing time as early as week 5 to prevent residual problems with stiffness

Splint

- Gradually discontinue digit gutter splint by reducing wearing time 1-2 hours each day but continue at night until week 8-9

ROM

- Week 6: Initiate PROM as long as extensor lag is < 10 degrees
- Week 7: Initiate taping or dynamic flexion splinting as needed if there are PROM deficits

Functional Activity

- Begin light use of hand and return to all functional activity by 8-10 weeks

Phase 3 –Maximize Passive Motion & Strength 8+ weeks

Goals for phase

- Restore full active range of motion while protecting the healing repair
- Prevent and reduce extensor lags if present

Other considerations

- For patients who are older or form dense scars, it may be necessary to decrease splint wearing time as early as week 5 to prevent residual problems with stiffness

Splint

- Continue digit gutter splint at night until week 8-9 or longer if extensor lag persists

ROM

- Unrestricted A/AA/PROM

Strengthening

- Week 8 –Initiate strengthening

Work Conditioning

- After 10 weeks a comprehensive work conditioning program for patients with work duties that require repetitive gripping or heavy manual labor is sometimes necessary



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References

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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.