

## Dr. Schmidt Trigger Finger Release

### Phase 1- Early Protective Phase (2 days – 10 days)

#### Goals for phase 1

- Promote healing of incision and maintain sterile environment to reduce risk of infection
- Pain and edema management
- Maintain and increase pain-free wrist and digit ROM

#### Criteria for progression to Phase 2

- Wrist and digit ROM is functional with minimal pain

#### Splint

Only if advised by MD, otherwise dressing only

#### Wound care

- The hand-based dressing is removed and light dressing is applied
- Educate patient in sterile dressing changes as needed

#### Edema Management

- Edema glove applied to hand and forearm as needed
  - **Do not use tubular digital compression sleeves**
- Elevation
- Manual Edema Mobilization (MEM) and elevation

#### PROM

- 10 minute sessions, 6 times per day, or to tolerance
- Isolated and composite digit MP and IP flexion and extension

#### AROM

- 10 minute sessions, 6 times per day
- Blocking exercises of MP and IP joints, composite flexion/extension, flexor tendon glides, abduction/adduction, opposition, intrinsic plus
- Wrist all planes of motion with simultaneous wrist and digit extension as tolerated if there is extrinsic tightness

## Phase 2- Intermediate Phase (10 days – 3 weeks)

### Goals for phase 2

- Achieve full pain-free A/PROM
- Decrease density of scar
- Resolve pain
- Restore light functional use of affected hand

### Other Considerations:

Composite wrist and digit extension is often painful. Progress from active to passive simultaneous wrist and involved digit extension as tolerated. It may be useful to retract scar during this stretch.

### Splint

No splint used at this time, dressing removed unless otherwise indicated.

### Scar Management

- Begin scar massage no sooner than 2 days after suture removal when scar is fully closed with scabbing present. Begin with light massage using lotion.
- Educate patient in scar management
- Apply scar remodeling products as needed

### Desensitization

Manual desensitization techniques may be initiated if appropriate

### PROM

Increased intensity of PROM to tolerance to improve end-range motion and decrease joint stiffness

### AROM

Continue exercises from phase 1 for 10 minute sessions 6 times per day until full ROM achieved

### Modalities

- Ultrasound for scar management
- Heat modalities to improve ROM and reduce pain

### Functional Activity

Encourage light functional use of the hand but no heavy lifting, sustained gripping or pinching

## Phase 3 – Late Phase (3+ weeks post-op)

### Goals for phase 3

- Initiate progressive strengthening
- Develop home exercise program
- Educate patient to prevent recurrence of symptoms
- Gradually return to full functional ADL and work tasks

### Other considerations

Patient should be educated on avoiding or minimizing tasks that may have contributed to the development of trigger finger and modification of tasks to reduce risk of recurrence

### ROM

Complete phase 1 & 2 active and passive ROM exercises until WNL

### Manual Therapy

Continue scar massage as indicated until scar density and adherence is absent or does not affect function

### Strengthening

- Initiate wrist isotonic strengthening
- Initiate grip and pinch strengthening with putty until back to baseline strength, or until strength is at same level as unaffected side
- Progressive strengthening regimen continued until strength is that of the unaffected side or WNL for patient

### Modalities

- Continue with ultrasound for scar
- Heat modalities to restore ROM if it has not progressed to WNL for patient
- Iontophoresis with acetic acid may be used for recalcitrant scarring

### Functional Activity

Gradually return to all ADL, home management and work tasks without limitations

## References

Cannon, Nancy M. et. al. *Diagnosis and Treatment Manual for Physicians and Therapists*, 4<sup>th</sup> Ed. The Hand Rehabilitation Center of Indiana. Indianapolis, Indiana. 2001.

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.

Wang, Y., Pi, B., & Yang, H. L. (2014). Acetic acid iontophoresis for recalcitrant scarring in post-operative. *Journal of Hand Therapy*, 27(3), 261. doi:10.1016/j.jht.2014.03.001