

# UVA HAND CENTER - THERAPY

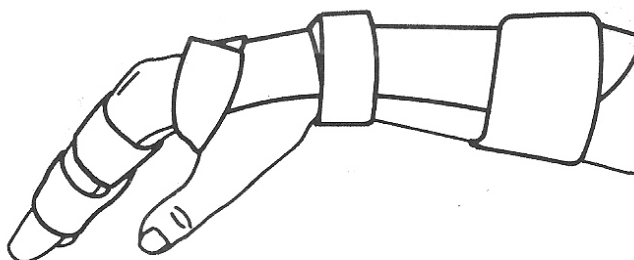
## Flexor Tendon Repair Zone 1 - 3 Early Passive Mobilization

### 3-5 days post operatively

Bulky dressing taken down and light compressive dressing applied

Splinting – Dorsal blocking splint is fabricated, placing the wrist and hand as follows:

Wrist	20dg flexion
MP's	70dg flexion
IP's	Max extension available



Splint is for 100% wear, except for 1x per day protected (wrist flexed) hygiene.

Exercises – Hourly passive exercises (ala Duran and Houser) are begun, 25 repetitions to all digits

Edema control techniques such as elevation and coban wrapping are encouraged

For patient's with limited PROM, a dynamic flexion component can be added by attaching hooks or suede tabs to the fingers and a volar pulley bar placed at the distal palmar flexion crease (Chow et al 1988). The fingers can either be kept in dynamic traction 100% between exercise sessions or alternatively strapped into splint during day. For sleeping, fingers are released from traction and strapped in maximum extension. If flexion contractures are seen to be developing, strapping into extension is preferred.

Therapy -- 1-5x per week depending on presentation, compliance and complications.

Primary goal at this point is to achieve full PROM asap.

### 2 Weeks post operatively

Splinting – DBS wear 100% continues

Exercises – Passive mobilization continues as above

Scar massage, elastomer insert wear, or Silicone Gel Sheeting is added once wound is closed.

If patient has significant PIP flexion contracture, active reverse blocking (PIP extension) is emphasized.

Therapy -- 1-3x per week depending on presentation, compliance and complications.

Primary goal at this point is to achieve/maintain full PROM, and begin scar remodeling process externally.

### 3 ½ - 4 weeks post operatively

Splinting – DBS is modified to neutral wrist extension, but still worn 100% as before.

Exercises – Progression into active flexion is started focusing on differential gliding, within the splint.

Scar massage continues, as does edema control HEP.

Modalities such as MHP, US and NMES can be utilized if scar or mm recruitment is an issue at this stage.

Therapy -- 1-3x per week depending on presentation, compliance and complications. Primary goal at this point is to begin protected active excursion of the repaired tendon.

***If patient has full active and passive motion at this stage, there is the likelihood that minimal extrinsic healing has occurred!***

# *UVA HAND CENTER - THERAPY*

## **Flexor Tendon Repair Zone 1 - 3 Early Passive Mobilization**

### **4-6 weeks post operatively**

- Splinting - DBS wear to continue 100% except during HEP.
- Exercises - Scar massage, edema control continues, as does modalities PRN.
- Wrist motion begins first in tenodesis only, then including digits into composite flexion and extension.
- Gentle isolated joint blocking may be added if significant scar formation is noted (ie PIP joint PROM exceeds AROM by 10dg or more) (Groth 2005). SF blocking is avoided at all costs due to higher risk of rupture.
- Therapy -- 1-3x per week depending on presentation, compliance and complications.
- Primary goal at this point is resolving any remaining passive stiffness and encouraging tendon excursion.

### **6-8 weeks post operatively**

- Splinting - Protective splinting is d/c during day, but patient is warned against heavy use (gripping, lifting, pinching).
- If patient has excessive volar flexor tightness or adherence, splint may be remolded as a resting composite extension splint to be worn during sleep.
- Exercises - A/PROM, scar and edema HEP continues, adding gentle composite digit extension as needed.
- Therapy -- 1-3x per week depending on presentation, compliance and complications.
- Primary goal at this point is maximizing ROM and scar resolution prior to starting gentle PRE's

### **8-12 weeks post operatively**

- Splinting None
- Exercises - Gentle grip strengthening may be added, wrist PRE's with moderate weight is allowed (up to 5#)
- Therapy -- 1-3x per week depending on presentation, compliance and complications.
- Primary goal is to restore full functional grip strength and progress toward RTW.

### **12 weeks and on**

At this point patient should be able to resume full ADL use, and moderate use at work. Many heavy laborers would benefit from work hardening or work specific conditioning programs to regain their overall strength prior to return to full duty.