Extensor Tendon Repairs Zones V & VI

REHABILITATION PROTOCOL

Patient Name:	Date:		
Diagnosis:			
Surgery:	Surgery Date:		

Postoperative Rehabilitation

3-5 Days Postop

- The bulky compressive dressing is removed. A light compressive dressing is applied to the hand and forearm, along with digital level edema control consisting of fingersocks of 1" CobanTM.
- A wrist immobilization with MP splint is fabricated, positioning the MP joints in 0° of extension and the wrist in 20° of extension. The splint is worn at all times.
- AROM exercises are initiated to the PIP and DIP joints within the restraints of the splint.

10-14 Days Postop

 Within 48 hours following suture removal, scar mobilization techniques may be initiated. This includes scar massage with lotion, along with the use of ElastomerTM, Otoform KTM or Rolyan 50/50TM

4 Weeks Postop

- AROM exercises are initiated to the wrist and digits 10 minutes each hour.
 Isolated EDC exercises are emphasized along with using VelcroTM trappers to
 assist with isolating MP joint flexion and extension. It is equally important to
 emphasize composite flexion and extension of the digits and wrist, along with
 simultaneous wrist and finger flexion to resolve or prevent extrinsic extensor
 tightness. And finally, it is important to isolate the EIP and EDQM when the index
 and small fingers are involved.
- NNMES may be initiated a as necessary to enhance tendon excursion. It is
 particularly effective when isolating the EDC with the IP joints taped in flexion.
- Scar retraction is initiated to minimize adherence of the dorsal scar to the underlying soft tissue structures. A piece of Dycern may be used to stabilize the

- skin proximal to the area of adherence. As the patient attempts to isolate the MP joints, scar mobilization can be performed to the adhered area.
- Ultrasound may be initiated as a deep heat to facilitate tendon excursion and to minimize scar adherence.
- For persistent edema, an edema glove such as an Isotoner[™] may be beneficial for resolving the remaining edema.
- The wrist immobilization splint with MP block is continued between exercise sessions and at night.

6 Weeks Postop

- PROM exercises are initiated to the wrist and digits. It is critical to ensure that
 any residual extrinsic extensor tightness is resolved at this time. It is equally
 important to monitor for an extensor lag and to modify the exercise program
 accordingly.
- Taping and/or dynamic flexion splinting may be initiated as necessary to increase passive flexion. Wearing a dynamic flexion splint 3-4 times a day for 45 minute sessions should prove adequate for recapturing passive flexion.
- The wrist and MP extension splint is continued between exercise sessions and at night.

7 Weeks Postop

- The wearing time in the wrist and MP extension splint may be gradually decreased. To decrease the wearing time by one hour each day should result in discontinuing the splint during the day within 7-20 days. Note: If an extensor lag is present beyond 15°, the splint should be continued between exercise sessions.
- Gentle progressive strengthening may be initiated to the hand and the wrist.

Considerations

- When MP joint extension lags are greater than 20°, it is recommended that the exercise sessions be decreased to 4-6 times a day to rebalance the extension in comparison to the flexion.
- It is critical to re-evaluate range of motion with each therapy appointment in order to ensure the patient is regaining flexion, while maintaining excellent extension.
 The range of motion measurements provide vital information for maintaining a well-balanced therapy program.
- For single digit tendon lacerations, it is possible to simply include an adjacent digit in the splint. In instances where two or more digits have incurred tendon laceration, it is recommended to include all four digits in the splint.