



# Town Center

## ORTHOPAEDICS

Baris Yildirim, MD  
HAND & WRIST SURGERY  
UPPER EXTREMITY SURGERY  
1860 Town Center Drive, Ste 300  
Reston, Virginia 20190  
O: 703-435-6604 F: 703-662-4506

---

### *Post-operative Instructions: Flexor Tendon Repair*

- Immediately after surgery: Keep hand elevated as much as possible and do not move fingers. OK to move elbow/shoulder as tolerated.
- Follow up with hand therapist 4-6 days after surgery and start St. John's protocol (next page) for exercises. Change to removable splint. Wash hand/wound daily with mild soap and water then pat dry. No soaking, no creams/ointments. OK to start gentle scar massage/desensitization.
- Follow up with me 10-14 days post-op. Remove sutures and apply steristrips. Goal by now is 1/2 fist.
- 2-6 weeks: Splint shortened with OT. Continue therapy per protocol. Goal is to achieve 3/4 fist at 4 weeks and full fist at 6 weeks. If patient is moving easily/too well, SLOW DOWN and protect. If not moving well enough, progress them quicker.
- 6-12 weeks: D/c splint. Plan for return to work with no torque, forceful gripping, firm grasping, lifting, or pinching activities allowed. Start light resistance at 8 weeks.
- 12 weeks: No restrictions. OK to return to full duty manual labor or contact sports.

### Yildirim's St. John's Protocol

Time Frame	Treatment	Goals/Considerations
Post-Op Day 1-3	<ul style="list-style-type: none"> <li>Encouraged to elevate and to not move the fingers at all. This will be completed at surgery and if for some reason the client is seen early or talked to on the phone</li> </ul>	<ul style="list-style-type: none"> <li>Edema Control</li> </ul>
Phase I Day 3-5	<ul style="list-style-type: none"> <li>Fabricate Dorsal Blocking Orthosis: <ul style="list-style-type: none"> <li>Wrist 30° extension (comfortable extension)</li> <li>MPs 30° flexion</li> <li>IPs full extension</li> </ul> </li> <li>Passive flexion-extension exercises in splint (5-10 reps every hour)</li> <li>Begin true active finger flexion up to ¼ of a fist "modified tuck (hook) position" while in orthosis 10 reps every hour <ul style="list-style-type: none"> <li>Goal is for active DIP and PIP flexion while the MCPs maintain a 30° flexed position (similar to our orthosis position).</li> </ul> </li> <li><b>NO tension, painful, or forceful movement.</b></li> </ul>	<ul style="list-style-type: none"> <li>Protection (no use of hand)</li> <li>Elevate hand above level of heart (rest on opposite shoulder)</li> <li>Edema control (coban wrap)</li> <li>Incision healing</li> <li>Pain management</li> <li>Limited ROM</li> </ul>
Phase II Day 5 - 2 Weeks	<ul style="list-style-type: none"> <li>Stress <b>"You can move it, but you can't use it!"</b></li> <li>Continue edema control with gentle finger coban wrapping (do not remove for exercises)</li> <li>Continue PROM exercises</li> <li>Instruct in active IP extension with MPs blocked in passive flexion</li> <li>Increase true active flexion upto 1/3 fist to 1/2 fist, provided that edema continues to be down. <b>We do NOT want a full fist. NO tension, painful, or forceful movement.</b></li> <li><b>If patient is moving easily/too well, SLOW DOWN. If not keep going.</b></li> <li>Instruct in scar management techniques once incision is healed</li> </ul>	<ul style="list-style-type: none"> <li>Continue edema control and pain management</li> <li>Increased but still limited finger AROM</li> <li>Scar management</li> </ul>
Phase III 2-4 Weeks	<ul style="list-style-type: none"> <li>DBS modified to Manchester short orthosis <ul style="list-style-type: none"> <li>Manchester splint allows the wrist to fully flex, but limits wrist extension to 45°</li> <li>MCP and IPs positioned the same as DBS</li> </ul> </li> <li>Continue full passive composite flexion-extension of all digits and passive composite flexion with active return to splint</li> <li>Continue full active IP extension with MPs passively blocked in flexion (<b>AVOID CONTRACTURES</b>)</li> <li>Initiate active tenodesis exercises in orthosis <ul style="list-style-type: none"> <li>Emphasis is for smooth, controlled, gentle motion.</li> </ul> </li> <li>Work toward half to 2/3 of an active fist and upto 45° wrist extension</li> </ul>	<ul style="list-style-type: none"> <li>Continue edema control and pain management</li> <li>Gentle limited wrist AROM</li> <li>Continued progression of allowed finger AROM</li> <li>We DO NOT want a full fist. Full fist goal at 6 weeks.</li> <li>If the tendon repair is to the SF</li> </ul>

	<ul style="list-style-type: none"> <li>○ At 2 weeks start ½ to 2/3 of a fist</li> <li>○ Progress to ¾ of an active fist at 4 weeks</li> <li>● May use modalities as indicated (US typically around 3-3.5 weeks post op) <ul style="list-style-type: none"> <li>○ <b>If ROM is good, do NOT use modalities</b></li> </ul> </li> </ul>	only, you can allow pt to remove IF from splint to allow gentle use of IF and thumb for light activity such as zippering jacket)
Phase IV 5 weeks	<ul style="list-style-type: none"> <li>● Begin completing exercises outside of orthosis</li> </ul>	<ul style="list-style-type: none"> <li>● Functional ROM</li> </ul>
Phase V 6 Weeks	<ul style="list-style-type: none"> <li>● Try to achieve full fist position by this time</li> <li>● Manchester short orthosis is discontinued</li> <li>● Transition to Relative Motion Splint (RMS) during daytime</li> <li>● Start to use hand for light activity <ul style="list-style-type: none"> <li>○ Very light keyboard use</li> <li>○ <b>NO heavy lifting or firm grasping</b></li> </ul> </li> <li>● Use hand based or digital extension orthosis at night as needed to correct extension lags/contractures</li> <li>● Plan for return to work with <b>No torque, forceful gripping, firm grasping, lifting, or pinching activities allowed.</b></li> <li>● <b>If motion is full and supple, warn client of the concern for late rupture if the restrictions are not observed.</b></li> </ul>	<ul style="list-style-type: none"> <li>● Functional ROM</li> <li>● Full active fist as tolerated</li> <li>● Awareness of chance for late rupture</li> </ul>
Phase VI 8 Weeks	<ul style="list-style-type: none"> <li>● Initiate light resistance activity/exercises</li> </ul>	<ul style="list-style-type: none"> <li>● PREs</li> </ul>
12 Weeks	<ul style="list-style-type: none"> <li>● Restrictions are lifted</li> <li>● Continue with scar management</li> </ul>	