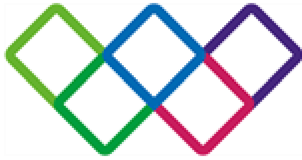
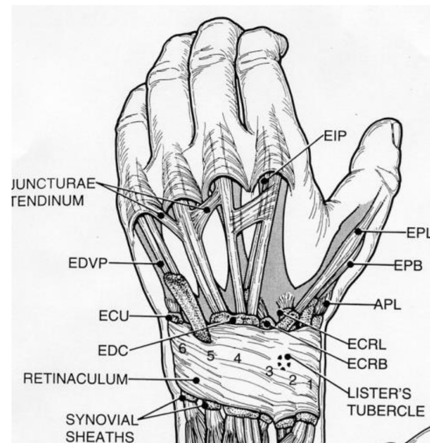


Chelsea and Westminster Hospital **NHS**
NHS Foundation Trust

<u>EXTENSOR POLLICIS LONGUS TENDON INJURY</u>
<u>THUMB ZONE II</u>

<u>MOBILISATION REGIME</u>



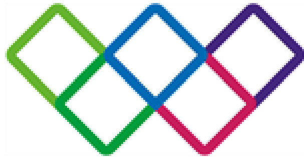
Please consult EPL rehabilitation guidelines prior to selecting this protocol. The protocol may be modified if appropriate with use of clinical reasoning. Please discuss with a senior therapist if unsure about selection of a particular protocol.

3-5 days post op

Patient to be seen in PDC or in hand therapy for removal of cast, wound check and application of light dressing.

Prior to commencing rehabilitation check that tendon is intact.

SPLINT



Hand based volar static splint extending up to tip of thumb, fingers free. Mid circumduction of thumb, full extension of MCP joint and IP joint.

Observe the patients contralateral thumb in terms of resting posture and movement. Often patients may not fully extend the MCP joint and it therefore may be inappropriate to force them into full extension. Consider the IP joint in terms of hyperextension. It is better to splint in neutral extension at the IP joint so that active hyperextension from the splint can be performed during exercises.

EXERCISES

1. Passive retropulsion of thumb from splint x 5 2 hourly
2. Active extension of thumb from splint concentrating on IP joint active hyperextension first then actively lifting the whole thumb x 5 2 hourly
3. Active IP joint flexion by scratching along splint and slowly back into extension x 5 hourly
4. Active wrist flexion and extension x 5 2 hourly

Considerations for exercises

If you are concerned that the patient will develop MCP joint stiffness you could consider allowing them to remove the splint for isolated easy MCP joint flexion, ensuring the IP joint is kept extended. Need to consider patient factors.

ADVICE

Light function of hand with fingers. Wear splint at all times.

Week 2 (14 days)

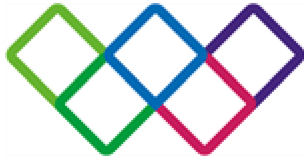
Patient should attend PDC prior to hand therapy for removal of sutures.
Check wound/scar if appropriate. Teach patient how to remove the splint safely to wash their hand and perform scar massage.
Reinforce no function with thumb.

EXERCISES

Continue with same exercises. Observe patient technique, movement achieved; compare this to the contralateral side.
Check MCP joint flexion. See above considerations for exercise and apply if appropriate.

Week 3 (21 days)

Check wound/scar. Reinforce scar advice – see week 2.
Reinforce no function with thumb.
If patient moving well at week 2 and able to comply with regime it may not be necessary to see at week 3.



EXERCISES

Continue with same exercises. Observe patient technique, movement achieved; compare this to the contralateral side.
Check MCP joint flexion. See above considerations for exercise and apply if appropriate.
If movement is poor start tenodesis exercises out of splint.

Week 4 (28 days)

Check wound/scar. Scar advice to be given if appropriate.
Measure ROM and compare with contralateral side.

SPLINT

Check splint, make adjustments as necessary.
Splint to be worn for night and protection whilst out.

Considerations

If patient is self-employed and does building work it may be appropriate to provide with mallet splint taped on so that they can return to work at 4 weeks, removing at home and doing their exercises.

FUNCTION

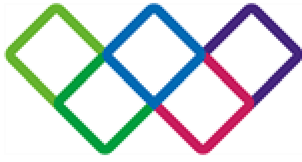
Patient can perform light functional activities. Consider activities that involve tenodesis to promote gliding of the EPL.
Light functional activities would include using hand for finger food, using hand to wash body, applying cream to face, short periods of typing, picking up small coffee cup.

EXERCISES (the frequency and number of exercises should be decided by the therapist depending upon the patient's movement)

1. Active IPj flexion and extension with MCPj in extension
2. Active combined MCPj and IPj flexion and extension
3. Allow active thumb movement in all planes.
4. Active tenodesis – could add thumb retropulsion with wrist in flexion

Considerations for exercises/splint

Think about the patient: demands on their hand (ie job/hobbies), compliance. If patient has very good movement it may be appropriate to keep them in the splint for 1 week longer.



5 weeks post op (35 days)

Patient may not need to attend for appointment if they have good movement at 4 weeks and it is felt that they are able to comply with a rehabilitation programme at home. Patient can be advised to discontinue the splint at 5 weeks post op.

6 weeks post op (42 days)

Check scar. Continue with scar management as appropriate
Assess active extension and flexion at MCPj and IPj and combined movements
Assess thumb ROM in all planes.
Assess the responsiveness of the IP joint – is the patient able to move easily between IP joint flexion and extension.

FUNCTION

For most patients they will be back to everyday function at 6 weeks. Consider patient's job/hobbies and adjust functional advice as appropriate.
Driving ok at 6 weeks

EXERCISES

1. Continue with previous exercises as appropriate.
2. Passive flexion if movement limited
3. Consider functional activities/exercises that work on the responsiveness of the IP joint to flex and extend quickly. Tailor exercises to the individual.

8 weeks post op and ongoing (56 days)

Check patient progress in terms of scar, movement and function. Tailor exercise programme to meet patient's needs.
For most patients they will be fully functional at 8 weeks, patients with manual jobs involving heavy thumb pinch may need to be restricted in function for another couple of weeks.